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XI

Angioli

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EPHEMERIDES
FELSINEÆ
RECENTIORES.

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OTIA
SIVE
EPHEMERIDES FELSINEÆ
RECENTIORES

FLAMINII MEZZAVACCA
Juriſconſulti Bononiæ, ac Prothonotarij Apoſtolici

CUM NOVIS MODERATIONIBUS

Ex mixtis Hypotheſibus Clariſſimorum Virorum

TYCHONIS, KEPLERI, BULLIALDI, CASSINI,
Atque ab Obſervatorio Regio Pariſienſi recenter
habitis Obſervationibus

Ab Anno 1701. ad totum Annum 1720.

Ad longitudinem Bononiæ gr. 34. m. 30.

Unâ cum initiali Aſtronomiæ, Trigonometriæ, Logorithmorum Doctrina, & alijs ad Cœleſtem figuram, ac Directiones ſpectantibus:

Recentioribus Tabulis ab eodem Authore, breviter in gratiam Candidatorum præmiſſis, & nunc auctis ab Altitudine Poli gr. 37. ad gr. 56. nec non cum totâ Solarium Sciothericorum explanatione, ſpeculativè, ac practicè.

TOMUS PRIMUS.

BONONIÆ, M. DCCI.
Typis Conſtantini Piſarij ad S. Michaelem prope Archigymnaſium.

Sumptibus Ludouici Mariæ Ruinetti Bibliopolæ Bonon. ſub Signo Mercurij.
SVPERIORVM PERMISSV.

BIBLIOTHECA FLORENTINAE

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ILLUSTRISSIMO, ET EXCELLENTISSIMO DOMINO

ALOYSIO FERDINANDO COM. MARSILIO

S. C. R. M. Actuali Camerario,

Excubiarum Campi Præfecto Generali,

Pedeſtris Legionis Colonello.

SIſto tibi, Illustrissime, & Excellentissime Vir, Ephemeridum D. *Mezzauachii* editionem recentiſſimam ab ipſo Authore elimatam, novemque Annis adauctam, à me verò poſtremâ diligentiâ recuſam, cui ut

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Nomen tuum præfigerem liberaliter indulſiſti. Planè ſi mihi quærendus fuiſſet, cui hoc opus nuncuparem, Vir magnitudine rerum pace, belloque geſtarum præſtantiſſimus, non alius à te occurrere poterat, qui & inclita fortitudinis exempla proximo bello Turcico pro Deo, & Cæsare militans præbuiſti; & fœderi cum inimicis percutiendo, unde maxima Regna Chriſtiano Imperio accreverunt, conſilia primùm, deinde operam celeberrimis Carlovitzienſibus Comitijs impendiſti; & Cęſareæ ditionis limites ab extremâ Podoliâ ad Mare Hadriaticum per tot regiones cultu, idiomate, religione diſſimiles, ampliſſimâ tibi traditâ poteſtate deduxiſti. Verùm, cum in Patrocinium Mathematici operis eligendus eſſet præ cæteris Vir in hoc diſciplinæ genere clariſſimus, non alius iterum à te occurrere potuit, qui Scientias quidem omnes, at cum primis Matheſim inter ipſa Arma, & negotia benignè complecteris, & in partem curarum tuarum admittis. Intelligis enim, Vir Illustrissime, & Excellentissime, quæ ſit militaris, civiliſque prudentiæ cum Matheſi familiaritas, eâque Duce expedire ſoles, quæ tibi incumbunt, nunc finium regundorum, nunc munitionum ſtruendarum negotia, cæteraque maxima, quorum famâ univerſam Europam jampridem complexus es. Aſtronomiam præſertim meritò in delicijs habes, non eo ſolum nomine quòd cęleſtium rerum contemplatio ad cęleſtes hominum animos maximè pertineat; ſed quòd & Temporum doctrina, & Geographia, & Res nautica, (ſine quibus Reſpublica non conſtat) ita cum eâ coniunguntur, ut invicem ſeparari, atque internoſci non poſſint. Teſtatus es id præcæteris egregio illo Danubiali opere, quod inter Politicas, Bellicaſque expeditiones meditatum propediem evulgabis; in eo ſiquidem, cum & Phyſiologiæ, & Chorographiæ, & naturali, civilique Hyſtoriæ, omnigenæque eruditioni ſuam

ſedem

ſedem deſtinaveris, tum præſertim Aſtronomiæ, & ijs, quæ ab Aſtronomiâ pendent cognitionibus partem ejus maximam conceſſiſti; correctâ plurimarum regionum latitudine, aliarum de novo determinatâ, exploratis per Joviales Satellites multarum longitudinibus, aliiſque inſignibus obſervationibus ad Aſtronomiæ incrementum inſtitutis. Cæterum cum Ephemerides exhibeant nobis dietim quamdam veluti cęleſtium rerum Hyſtoriam, quæque nonniſi improbo labore e Tabulis erverentur ſub unum obtutum proponant, hac maximè de cauſa dicandum, vovendumque erat tibi hoc compendium, qui & cęleſtem diſciplinam graviſſimis curis anteferre non potes, & eam tamen colere promovereque non deſinis. Cum verò has Ephemerides D. *Mezzavachius*, ex Hypoteſibus optimis omni ſolertiâ ſupputaverit, habebit, ſpero, Opus ipſum quo tibi ſe approbet; vel eum certè approbet obſequentiſſimum animum, quo ex intimo omne tibi fęlicitatis, & gloriæ à D. O. M. deprecor incrementum

D. T. ILLUSTRISSIMÆ, ET EXCELLENTISSIMÆ

BONONIÆ CAL. SEPTEMB. MDCCI.

Humilimus, & Obſequentiſſimus Famulus

Ludovicus Maria Ruinettus.

Euſta-

Euſtachius Manfredius Lectori S.

SExtusdecimus Annus vertitur, ex quo Bononiæ prodierunt nouiſſimæ Ephemerides D. Mezzauachij *poſt Annum videlicet* 1684., *cum quo prior editio ceſſabat, in Annum vſque* 1711. *ab Authore clariſſimo continuatæ. Quanto eruditorum plauſu id operis exceptum ſit, vel inde conſtat, quod breui exemplaria omnia ita diſtracta, & per Europam ſparſa ſunt, vt fruſtrâ nunc demum apud noſtros Bibliopolas oblata qualibet conditione dictim conquirantur. Scilicet cum ſolæ vigerent tunc temporis Argoli Ephemerides, cuius in Ecclipſibus præſertim ſupputandis (quæ rei pars eſt præcipua) vel oſcitantia, vel deceptio diſſimulari non poterat, intellexere ſtatim cæleſtium rerum amatores quanto interuallo* Mezzauachius *illum anteuerteret, qui & omnem induſtriam in hoc negotio poſuiſſet, & optimis vſus eſſet Luminarium tabulis, quæ Argolo non ſuppetebant. Certè Caſſinianum* Solem quis dicere falſum audeat, *poſtquàm non modo Bononiæ, aut per Italiam, & Europam, ſed in inſulta etiam Cajenna, alijsque regionibus diſtantiſſimis conſtanti experimento fides eius incorrupta deprehenditur? A Sole autem Lunares, cæterorumque Planetarum motus regi, ac temperari nemo neſcit: cuius menſuras cum Argolus non eſſet aſſecutus, neceſſe fuit, vel hac de cauſa plures in Vniuerſum eius Syſtema errores corriuari. Cæterum cum huius Ephemerides Annum elapſi ſæculi poſtremum non excederent, ſupererat* Mezzauachij *calculus iam non modò omnium optimus, ſed ex omnibus vnicus, nec tamèn (quod dolendum) in tempus multum deductus. Quod ego animaduertens in animum induxi e re literaria fore, ſi Authorem amiciſſimum exorare mihi contingeret, quando noua Ephemeridum eius editio vndique poſcebatur, augeret illam annis aliquot, diuque intermiſſum laborem in publicum commodum reaſſumeret. Ille autem quamquàm grauiſſimis vrgeatur Iudiciorum, quibus præeſt negotijs, & iampridem a Mathematicis diſciplinis ad rem publicam gerendam commigrauerit (pari ſcilicèt vtrobiq; gloria) neceſſariam tamen communi bono moleſtiam non detrectauit. Itaque quoties ſe ſe recolligere poterat huic operi intentus, breui nouennium Ephemeridum (quâ eſt ſupputandi celeritate) ad finem perduxit. Ad hæc, cum in priori illa editione Iouis motus vehementer a Cælo deerrare cognouiſſet, aliam a fundamentis*

eius

eius Syderis Ephemeridem molitus eſt, iuxta quam & vulgatam correxit, & nouam inſtaurauit. Demum vitiata aliquot Solis, & Saturni loca ex Anno 1707. *in poſterum a mendis omnibus repurgauit.*

Eæ ſunt ergo, quæ nunc exeunt Ephemerides; quas etiam elegantioribus, vt potè Piſarrianis Typis excudi, & corrigi perdiligenter, accurauit Ludouicus Ruinettus: quamquàm, vt ſatear, primam partem, quę pręcepta, & Canones continet (hac etiam editione a D. Mezzauachio *longè adauctam) multa adeò Typographi ſphalmata corruperant, vt vix præſtari potuerit quin eorum complura correctorum ſolertiam effugerint.*

Temperare autem non poſſum quin hoc loci de iniquo Ephemeridum, imò Aſtronomiæ ipſius per Italiam ſato conquerar. Reputatur videlicet a pleriſque inanis, & peruerſa eiuſmodi occupatio, quaſi non alius horum ſit vſus quàm Horoſcopis erigendis, aliiſque Aſtrologicis deliramentis; & cum non ita pridem cæleſtis hęc diſciplina Magini, Galilæi, Caualerij, Riccioli, Grimaldi, & ipſius incliti Caſſini *temporibus Italiam veluti ſibi Regiam deſtinaſſet, peſſima rerum conditione factum eſt, vt ea nunc apud paucos noſtrorum meticuloſè deliteſcat, dum interea per Angliam, Galliam, Germaniam, imò vel per Sinas, & Indiam magno in honore verſatur, & a potentiſſimis Regibus omni ſtudio promouetur. Cæterum norunt eruditi non minus quid ad Rempublicam Aſtronomia conferat, quàm quid ad Aſtronomiæ vſum Ephemerides, ſine quibus, neque inſigniorum obſeruationum idonea tempora peruideri, neque Obſeruationes cum Hypoteſibus comparari commodè poſſunt. Nos etſi omni Inſtrumentorum ſupellectile, omnique fructus ſpe deſtituti, non ceſſamus tamen oculos in Cælum intendere; & dum Viri celeberrimi* Caſſinus, Flamſteedius, DelaHire, Halleius, Eimmartus, VVurzelbaurius, Kirchius, Kokanskius, Zimmermannus, *aliique permulti Aſtronomiam præclaris inuentis adaugent, quo poſſumus modo eorum veſtigia longo interuallo conſequimur. Itaque in hoc Bononienſi Gnomone iam a triennio (poſt Clariſſimum* Guglielminum *Anteceſſorem, eundemq; Præceptorum meum ornatiſſimum) dietim Solis loca adnotauimus, & plures circa Planetas cum fixis comparatos obſeruationes inſtituimus, vulgaturi eas aliquando, ſi gratiam aliquam apud noſtros inire nos poſſe conſideremus, quarum in ſpecimen nonnullos Lunæ ad Palilitium appulſus vnâ cum* D. Victorio Stancario, *&* D. Gabriele *fratre meo Aſtronomiæ amantiſſimis obſeruatos hìc adijcere non grauabimur.*

Anno ſiquidem 1699. *die* 18. *Auguſti animaduertimus lucidum Lunæ limbum occultaſſe Aldebaram hora* 14. 6'. 39''. *poſt meridiem in magno Bononienſi Gnomone, vt quotidie ſolemus, obſeruatum, quâ parte in recta linea*

verſatur cum Centro Ariſtarchi (ſumptis, ex Riccioli Selenographia macularum nomenclaturis,) & cum margine Boreali Copernici (apparenter inquàm Boreali, Teleſcopys enim vtebamur 12. & 13. pedes longis obiecta inuertentibus, idemquè in ſeqq; intelligendum eſt) rurſumque Aldebaram emerſiſſe inter horam 15. 5'., & 15. 5'. 44". itaut paulò poſt, hora ſcilicet 15. 9. 32", eſſet in recta linea cum centro Tymocharidis, & ſuperiori parte Ariſtarchi. Et erat tunc quidem nobis Horologium non vndequaque perfectum, ſed explorata inaqualitatis, vt non dubitemus, memorata tempora intra pauca ſecunda ſcrupula Cœlo conſentire. Deinceps autem vſi ſumus Horologio exquiſitiſſimo Cycloide inſtructo ſingulas temporis ſecundas ſingulis ſimplicibus oſcillationibus indicante, & ita per Solis, fixarumque recurſum dietim examinato, vt vix vnquam in eo 2. vel 3. ſecundarum inaqualitatem poſt octo aut decem dierum ſpatium deprehenderimus. Hoc igitur, & ſolitis Teleſcopys inſtructi Anno 1700. die 2. Ianuarij eiuſdem Stella immerſionem ſub Luna adnotauimus ad horam 7. 3'. 42". p. m. dum eſſet in recta linea cum Centro Copernici, & Dyoniſio; emerſionem verò h. 8. 16'. 32" dum eſſet in recta iterum cum Centro Copernici, & Taruntio. Eodem etiam Anno die 25. Martij hor. 6. 48'. 19". tam per Tubos opticos, quàm nudo oculo (vt veſpertinum Crepuſculum fauebat) viſa eſt Aldebara ſub Lunam ſe condere in recta, qua ducitur per medium Maris Criſium, & abſcindit trientem diſtantia inter Vitruuium, & Poſſidonium, Vitruuium verſus; nec emergere ante horam 7. 48'. 47". ex eo ſcilicet puncto Lunaris marginis, quod infrà tangentem per Auſtralem Maris Criſium partem eductam tota ferè huius macula longitudine ſitum eſt. Sed & labente Anno 1701. die 16. Februarij hor. 7. 21' 19". viſum eſt Palilitium ponè Lunam abſcondi, & tunc ducta linea ab eo ad Centrum Platonis, & per hoc punctum excitata perpendiculari, tranſibat hac ad ſiniſtram Archimedis media huius macula latitudine; hora autem 8. 30'. 13". Alde bara a Luna ſe ſe ſubduxit, & poſt 1'. Temporis apparuit in recta cum Autolyco, & Archimede. Die etiam 2. Iulij vulgo 3. eiuſdem Anni hor. 16. 17'. 37". p. m. nimirum oriente iam Sole accidit nobis nihilominus vidiſse Aldebaram ſub Lunam deliteſcere, neque Phaſes alia ob ingruentem diei fulgorem explorari potuerunt. In omnibus autem his obſeruationibus Lunares etiam Diametros micrometro dimenſi ſumus, differentiaſque inter Rectam Stella, & Lunaris Centri Aſcenſionem, atque Declinationem, methodo nobis familiari, atquè, vt videtur, percommoda, & tuta identidem captauimus, qua hic recenſere longum foret.

Potius ergo ex obſeruationibus noſtris circa Eclipſin Solarem Anni 1699.

diei

diei 23. Septembris Horologio Cycloidali, per ſolita Teleſcopia habitis illud tantum indicabimus contigiſſe luminarium appulſum hor. 20. 56'. 16''. vel 31''. p. m. diei 22. Summam obſcurationem dig. 9. ¼ ad Boream viguiſſe hor. 22. 14'. 30''. Solem verò a defectu euaſiſe hor. 23. 36'. 33''. vel 49'', eiuſque Diametrum Lunari minorem apparuiſſe forte decem ſecundis ſcrupulis. Quæ, etſi gratiam nouitatis iam penè exuerint, non iniucunda tamen Aſtrophilis futura coniecimus. Vale.



Vidit D. Sebaſtianus Giribaldus Cler. Regul. S. Pauli in Metropolitana Bononiæ Pœnitentiarius pro Eminentiſsimo, & Reuerendiſsimo Domino D. Iacobo Cardinali Boncompagno Bononiæ Archiepiſcopo, & Principe.

Ego infraſcriptus pro Sanctiſsima Inquiſitione Operum Mathematicor. Reuiſor Ordinarius præſentes Ephemerides Flaminij Mezzauacca publici Iuris fieri poſſe cenſeo.

Hieminyanus Rondelli.

Attenta prædicta Atteſtatione

Imprimatur.

F. Ioannes Chryſoſtomus Ferrari Vicarius Generalis Sancti Officij Bononiæ.

Ex-

Excellentiſsimi D. Doctoris Petri Herculis de Belois.

Cum alluſionibus ad Cognomen, Lilia gentilitij Stemmatis, Opera Legalia, & Aſtronomica, indefeſſi Viri,

D. FLAMINII MEZZAVACCA.

HActenùs à Terris Aſtræa migrauit in Axem
Ad nos *Flaminio* nùnc reuocante redit.

Virgo Aſtræa lubens *Mediæ* Te iungito *Vaccæ*
Iſta *pudicitiæ* ſymbola *Vacca* gerit.

Eiuſdem.

L*ilia* ſola gerat, qui fœdera Virginis ambit
Qui volet *Aſtræam*, purus ad *Aſtra* volet.

Dell' Eccellentiſs. Sig. Dottore Lodouico Balducci da Caſtrocaro.

Alludendo alle Scienze Legali, Aſtronomiche, ed a' Gouerni del Sig. MEZZAVACCA.

SV' le penne dell'Aure alzarſi al Polo
I tuoi vaſti penſier, FLAMINIO, ammiro;
E doue forman gli ASTRI aureo raggiro,
Prender le norme a regolare il Suolo.

Per rotar delle Sfere il vago ſtuolo
L'intelligenze ſue brama l'Empiro;
E mentre i rai del Sole in te rimiro,
Per goderti la notte affretta il volo.

Delle LEGGI ſolcando il Mar profondo
ASTREA t'affida a non temer procelle,
S'ora, Atlante di vn Ciel ſoſtieni il pondo.

O di vn Cor generoſo Arti più belle!
Giacchè ſcorge a' ſuoi Vanti anguſto il Mondo,
S'erge FLAMINIO a dominar le Stelle.

Programma

Flaminius de Mezauachis

Anagramma

Eia! Hic Muſam fandi zelus.

MVlta tibi Vranie, Vir ò doctiſſime debet:
Sed nec pauca ſacer debet Apollo tibi.
Huius enim curſus, & lumen pandis: at illam,
Cœlica ſcrutantem doctiùs Aſtra iuuas.
Inſignis Muſam fandi *te* zelus *adornat:*
Inſignem lauris ornat Apollo Virum.
Scilicet, vt Muſis gratus, cum laude perennes:
Quam tibi tùm Muſæ, tùm tua ſcripta parant.

Occinebat

PAVLVS RITTER EQVES AVRATVS &c.

Clariſſimo Viro Domino
FLAMINIO MEZZAVACCA
Nobili Bononienſi
I. V. D.
Prothonotario Apoſtolico &c.
PAVLVS RITTER
Eques Auratus &c.
S. P. & F.

NOn mirêrè noui lecturus metra Poetæ
Ad tua qui primum limina fortè venit.
Carminis ignotus nam quamuis ſit tibi Scriptor:
Notum illi faciunt te tua ſcripta ſatis.

Quæ

Quæ quaſi iam totum paſſim vulgata per orbem.
Finibus in patris Teuto Lehuſque legit
Quantùm te Aſtronomi ſuperant Ætate priores:
Tantum illos ſuperas, ingenio, arte, modo.
Vt non exiguas hac iam merearis in vrbe.
Cęſareâque Aulâ Famam, & Honoris opes.
Quas tuę Ephemerides, Studium cęleſte mehercle
Accumulant certâ perfacilique via.
Nam quiſcunque opus id muſis ſcrutatur Amicus:
Mox ſtupet ingenij celica dona tui.
Quo Patrię iubar eſſe nouum, Mezuache, *videris;*
Luſtrans Elyſias ſtella coruſca plagas.
Cuius & ipſe Artis captus cęleſtis Amore:
Authorum, á pauco tempore, ſcripta lego.
Dogmata ſed quorum Tyro non aſſequor: illos
Iuſtâ laude lubens proſequor, atque colo.
Hinc ſubiungit huic Carmen mea muſa Tabellę,
Nominibus votum Carmen Amice tuis,
Quod quamuis rude ſit, gratum digneris habere:
Sinceri affectus munera Carmen habet.
Obruta nàm varijs mea muſa, hoc tempore, curis.
Sàt facere Officio non valet vſque ſuo.
Te & colo prę reliquis: reliquos qui ſcilicet omnes
Cęleſti hac longè doctus in Arte pręis;
Namque nouo video quod ſis pro ſidere, Mundo
Natus: ſidereo vel magis Axe datus,
Vt non uana feras antiquę nomina ſtirpis:
Pro Tauro Vaccam *certiùs Aſtra ferunt.*
Scilicet altitonans quondam cum Iuppiter Ius,
Eximię forma, captus Amore fuit;
In niueam mutat Corpus prænobile Vaccam*;*
Arte hac Iunoni dulcia furta tegens.

Aſt

Aſt & amans Mulierque, rei bene Conſcia Iuno,
Hanc ſibi pro Dono Sponſa, ſororque petit.
Centoculum obtentę Cuſtodem præficit Argum:
Atque nouo, his medijs, arcet Amore Iouem.
Et poſtquàm Vaccę *tali Cuſtode perempto:*
Æſtri illam Iuno mortificaſſet ope.
Dilectę Altitonans, iam ritè miſertus Amantis:
Iſis ei nomen, priſtinaque ora dedit.
Connubioque illam Regi coniunxit Oſiri:
Tunc apud Eoos ſummus, Oſiris erat.
Quę, poſt quàm, natos peperit Regina gemellos:
Nuper ad amplexus ingrauidata Iouis.
Grata Ioui res hęc; in Cęlis digna notari
Viſa Ioui proles, viſaque Mater erat.
Hinc ponit charam prima inter ſidera Vaccam,
Iuppiter, & ſtelis pluribus ornat Amans.
Illic Hoſpitium Veneri dedit ille decorum:
Illic in ſolio ſtat Venus alma ſuo.
Illùc Luna, ſuos, veniens, exaltat honores:
Et nocuum Martis numen adeſſe timet.
Proximè ei Prolem voluit ſtabilire gemellam:
Commodius proles, vt pia Mater alat;
Et quià Mercurii ſtudio potiora peregit.
Ille Argum necat, vt libera Vacca *foret.*
Præfecit hunc Geminis, ornatque ibi ſede diurna:
Virgineos noctu cum petat ille thoros
Iuppiter hos Natos tamen ipſe veretur adire:
Aſtum Zelotypę Coniugis vſque timens.
Namquè aliunde nouas Cæli mirata figuras:
Non minimâ poterat ſuſpicione capi.
Iam ſibi Vacca *fuit Cælis tolerabile ſignum;*
Ipſum nàm in forma viderat ante Bouis.

Pel-

Pellicis alterius tranſmutans Corpus in Vrſam:
Vindictam læſi ſumpſerat ipſa thori.
Sed fratres habuit pro ſuſpicione gemellos:
Tàm pulchro Cęli quos videt eſſe loco.
Aſt deus hanc recti ſimulatâ fronte fefellit:
Hoſque Helenæ fratres nominat eſſe pios.
Quos propter rarum fraterni munus Amoris:
Exemplò dignos ętheri adeſſe putat.
Poſteriora ſibi vult Cęlica Vacca *latêre:*
Illa verecundus ſic iubet eſſe decor.
Vndè quià apparet medio cum corpore Taurus?
Vacca*ne ſit? dubitant, pro* media*que vocant.*
Aſt errant quicunque vocant hanc nomine Tauri:
Ipſa Io Vacca *Eſt*, Vacca*que amata Ioui.*
Ipſaque tàm Terris, quám Cęlo allata deinde,
Diuarum celebris ſemper honore fuit.
Felix, Flamini, *potis eſt tua Patria dici:*
Quę genuit doctos, iam tot in orbe viros.
Sed nunc ter felix potis eſt tua Patria dici:
Quæ dedit Atlantem Te, Axe ſtupente, nouum.
Occidit Argolici ſpectatum Sidus honoris:
Occidit Italiæ: ſurgat vt inde tuum.
Non vt in Italicis tantummodò ſurgeret oris:
Aſt vt & in toto luceat orbe dehinc.
Si Fata hoc ſinerent, ſi vellet publica cura
Tranſigerem Vitam, Te penes, ipſe meam.
Vranie ad nutus ſtudioſa lubenſque fidele
Obſequium ferret noſtra Camæna tuæ.
Aſt vbi præſentem nequeo celebrare decenter:
Abſentem, memori Mente, Animoque colam.
Et ſi quæ fuerit noſtris data Gratia muſis:
Vt ſuperent flammas, quas ſibi & ipſe minor.

Vir-

Virtutis, Vir magne, tuæ monimenta vigebunt
In noſtris etiam cuncta per æua libris.
Sic Tibi nàm prompta pietate placere ſtudebo:
Vt poſſet natum quemque decere probum.
Quali Herede tuæ non diminuentur, at vltrò
Creſcent diuitiæ, Fama decora Tibi.
Iamque per Auſtriacas nomen laudabile Terras,
Illyricas reſonat, Pannonicaſque tuum.
Idque Bohemorum Proceres iam perſonat inter:
Affectu, & Studio, Vir venerande, meo.
Vt præclara tui iam poſcant, Otia *habere:*
Quicunque in tanta celſius Arte ſtudent.
Cuius vt affectus hæc ſit mea litera Teſtis:
Meque tuo vlteriùs proſequi Amore: precor.
Cæterùm ad afflatus Cæli; Terræque benignos
Adque Annos felix, Incolumiſque Vale.
Viennæ Auſtriæ 28. Martij 1688.

R E S P O N S I O

Illuſtriſſimo Viro D. PAV. RITTER Equiti Aurato &c.

FLAMINIVS MEZZAVACCA

I. V. D. Prothonotarius Apoſtolicus &c.

A' Cœlo, & Mundo quæ ſunt meliora precatur.

C*Vm finem extremum, ſub niſo cruce iacentis,*
Et de quo ſapiens noſter Apollo canit:
Vacca *ſit an Taurus, mediumue haùd noſcere; namque*
Pars prior apparet, poſteriora latent,
Fulgeſcens radiis Hyperione natus agebat,
Atque pari ſpatio Veſper, & Ortus erant;
Hic vbi me cogit ſuſcepti muneris ardor,
Felſinę & hinc patrio plurimùm abeſſe polo:
Vrbe hac Brenni, cuius * penſati improbus auri
Arbiter enſis *humo, Romuli in Orbe, ſacrâ;*
His tantùm mihi contigit venerarier oris,
Pręclarì cordis Nuncia Metra, tui.

* Sil. Ital. lib. 1.

Nèc

Nèc mora: Acidaliæ feſtinauere Sorores
Fingentes, plectro conſule, dulce melos,
Aglaieque genas blandę, & vaga lumina Lete
Reddidit os roſeum debita Vota tibi.
Poſt ſtatui rupiſſe moras ad culmina Pindi
Bellerophontei quo fluit humor equi,
Numinis auguſti Vatum obtenturus ab ara
Fatidicâ alternis, congrua verba notis;
Indulſit caldis precibus Latonia Proles,
Et quę diſtinguit iuncta pagella tulit.
A' folio petij albeſcenti, vt cuncta referret
Hęc tibi, ſed quaſsù quid timuiſſe probans;
Dixeram: Age inuictis animis, non Martis alumnos,
Ardua pugnarum nèc trepidare vales!
Quid tibi tempeſtas armorum? aut ęrea bombis
Machina flammigeris? Omne quid Ignis Opus?
Cęlica ſi laurus, quę cingit tempora Ritter,
Quam & metuunt ſuperis fulmina, miſſa plagis!
Te nocte, atque die tutum ſeruabit vbìque,
Et longè ex ipſa Cirrhę animante iubar!
Vade igitur pręceps, quò Heorum Strenua proles,
Imperium diuus quò LEOPOLDVS habet.
O' felix folium te, terque quaterque beatum,
Ac ego marceſcam ſorte patente tua;
Tu Cęlum attinges id, ſub quo Gloria CHRISTI.
Sanctô Conſiliô perficienda datur;
Plenis & meliùs poteris ceciniſſe triumphis:
* Diuiſum Imperium cùm Ioue CÆSAR habet. * Martial. Epigr. 1.
Et Tu verſaris qui Ritter in ore Virorum,
Virtutum Tutor, Cor Charitum, atque genus.
Excipere ipſum oculo ne dedigneris Amoris,
Cui toti, ęternùm, Candor amicus erit.
Ac ſi deficeret quidquam, ſcripſiſſe memento,
In curis Themidos, Patria ab Vrbe procul.
In me pleno Animi affectu, rue, & undiquè ſemper.
Cuncta tibi mea erunt obſequioſa: Vale.
Brixiæ 17. Kalend. Iulij 1688.

DE

DE ASTRONOMICIS SVMMIS

PRIMVM PVNCTVM.

SVppoſita aliquali vulgaris numeri, & Geometriæ cognitione, ſciendum, quòd quilibet circulus cuiuſuis magnitudinis intelligi debet diuiſus in gradus 360. & quilibet eorumdem graduum 360. in ſexaginta alias portiones, quarum quælibet, vel minutum, vel numerus primus appellabitur; Inſuper omne minutum, ſupponetur conſtare alijs minutis 60. quæ dicentur ſecundæ, & ſcietur quamlibet ſecundarum continere 60. tertias, & quamlibet tertiam poſſidere 60. quartas, & huiuſmodi, ſemper eodem ordine de quartis in quintas, &c.

Quodque de gradu dictum eſt, etiam diſponendum in horarum diuiſionibus, cum hora quælibet fiat diuiſa in 60. minuta, quodlibet minutum in 60. ſecundas &c.

Quarè quotieſcunquè apparebit quantitas tertiarum ex gr. 60. nota erit vnica ſecunda, quæ formatur à 60. tertijs;& huiuſmodi, ſi ex aliquo reſultabunt tertiæ ex. gr. 110. cognita erit vnica ſecunda, cum 50. tertijs, & ſic de cæteris, & quælibet minutia ſub propria ſpecie collocari debet, non maior numero 59.

In ſupputatione ſuprà circulum quemdam, qui Zodiacus appellatur, ut infrà, quantitas graduum non excedet quantitatem ſigni, quod conſtat gradibus 30. nam totus Zodiacus à duodecim ſignis in portione æquali diuiſus intelligetur, & procedit hoc tàm prò rationali, quàm ſenſibili Zodiaco, de quibus dicetur in puncto de Zodiaco.

Hinc oritur, quòd cum huius circuli cogniti erunt ex. gr. gradus 30. cognitum etiam ſit ſignum unum; cum gradus 65. pariter cognita ſint duo ſigna, cum quinque gradibus, &c. ſimiliter, cum colligentur ſigna 12. etiam cognitus ſit totus circulus.

Nequè huius circuli gradus, per numeros 30. vel 31. & ſuprà, explicandi ſunt, ſed ex. gr. ſignum vnum, pro gr. 30. & ſignum vnicum

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cum gradu,pro gr. 31. & quoties ſummam aliquam graduum menſurabit quantitas graduum 30. tot ſigna reſervabuntur,hac tamen cautela, quod non tranſeant unquam 12., quod ſi eueniret, tot. 12. ſigna abijcienda eſſent, quot in ipſa continerentur.

In columna horarum non apponetur numerus maior 24. quia ità indicium habetur diei completæ, quæ ad dierum columnam eſſet etiam transferenda, cum omnia ſuis locis à ſpecie determinatis locare neceſſe ſit.

Horę, Signa, Gradus, Minuta, Secundæ, Tertiæ, Quartæ.
Characteres.
H. S. G.vel O. *I.* *II.* *III.* *IIII.* &c.

His poſitis facilimum erit cognoſcere methodum ſummæ Mathematicæ, quæ nihil aliud eſt, quàm duarum pluriumuè quantitatum in vnam ſummam collectio, & fit vt in exemplis ſequentibus.

S.	o.	*I.*	*II.*	*III.*	
6.	4.	10.	20.	58.	C
9.	27.	36.	47.	41.	B
Sig. 4.	1.	47.	8.	39.	

D

	H.	*I.*	*II.*	*III.*	*IV.*	*V.*
	12.	17.	29.	32.	37.	18.
	14.	29.	56.	46.	39.	26.
	7.	33.	51.	58.	44.	19.
Summa H.	34.	21	18.	18.	1.	3.
Abijciantur horæ 24: remanent H.	10.	21.	18	18.	1.	3.

Incipiendo à B, & C, coniungendæ ſunt tertiæ 41. & 58. & fiunt tertiæ 99. in quibus unica ſecunda contenta transfertur ad ſequentem ſeriem ſecundarum, & ſimul colliguntur 1. 47. 20. ſecundæ, & habentur ſecundæ 68. nempe minutum, & ſec. 8. cum quo minuto 1. iunguntur 36. & 10. & eliciuntur minuta 47. abſq; alio: Deindè ſummantur gradus 4. & 27. proſiliunt gradus 31. nempè ſignum vnum cum vnico gradu, cum quo lato ſigno vniuntur ſigna 9. & 6. & fiunt ſigna 16. hoc eſt ſolum ſigna 4. quia ſemper ſigna 12. reijcienda, vbi, & quoties ſupra 12. ſigna inuenitur exceſſus, & ſic habetur ſumma ſig. 4. 1. 47. 8. 39'''.

In exemplo D. ſimilis eſt operatio præterquàm in horis, à quibus excedentibus horas 24. ut potè horis 34. demendæ ſunt horæ 24. ut inutiles, vt fiat ſumma vera hor. 10. 21'. 18''. 18'''. 1''''. 3'''''.

De

PVNCTVM II.

PAriter ſubtractionis regulam facilimum erit addiſcere, quæ ſubtractio numeri à numero dicitur eſſe vnius ſecundum alterum diminutio, quâ peracta oritur tertius numerus, qui Reſiduum appellandus erit, quod eſt differentia, aut intercapedo eorumdem duorum numerorum.

Cùm continget numerum alteri auferendum eſſe maiorem eo, à quo numerus maior demendus eſt, minori, ſi ſimus in ordine ad minuta, ſecundas, tertias, &c. ſemper addendus eſt numerus 60. ut ſic fiat major numero ſubducendo; ſi ſimus in ordine ad ſigna, numerus 12; ſi in caſu horarum, horæ 24.

		E				Exempla		H				
S.	o.	*I.*	*II.*	*III.*				H	*I.*	*II.*	*III.*	
9.	8.	7.	6.	10.	G		Dies 3.	14.	20.	43.	19.	M
6.	29.	39.	2.	54.	F		Dies 2.	19.	37.	41.	28.	L
Sig.2.	8.	28.	3.	16.		Differentia	Dies o.	18.	43.	1.	51.	

In exemplo E, inchoandum eſt ab F, & tertiæ 54. ſunt ſubtrahendæ à tertiis 10. G, quòd quia ſic fieri non poteſt adduntur tertijs 10. tertiæ 60. & fiunt in totum tertiæ 70. à quibus demptis 54‴. remanent tertiæ 16. collocandæ ſubter 54. deindè propter mutuum 60. tertiarum, quæ formant vnicam ſecundam, debet reddi ſecunda vna ſeriei ſecundarum, & quantitatis ſubtrahendę, vt hic ſecundis 2. & fiunt 3. quæ demptæ à ſec. 6. ſuprapoſitis dant remanentes ſec. 3. ponendas ſub. 2. vt in exemplo; Poſteà ſubtrahenda ſunt 39. minuta à min. 7. quod cùm fieri nequeat, quia 7. minora ſunt min. 39. adiunguntur min. 60. minutis 7. & conſtituuntur 67. à quibus, ſi auferantur min. 39. remanent ſubſcribenda minuta 28. & tranſeundo ad columellam graduum, propter dicta, coniungatur gradus, cum grad. 29. & productum 30. quia à grad. 8. non poteſt ſubduci, adduntur gradibus 8. gradus 30. & fiunt 38. à quibus, dum ſubtrahuntur grad. 30. habetur reliquum gr. 8. etiam deveniendo ad vltimam ſeriem ſignorum, propter mutuatos gradus 30. addendum eſt ſignum ſignis 6. & habentur 7. quæ ſubducta à 9. ſig. conſtituunt duo ſigna reliqua, & totam differentiam inter duas quantitates exempli E. ſig. 2. 8. 28′. 3″. 16‴.

In ſchemate H, ſimilis eſt operatio præterquàm in horis,nàm,vt poſſit fieri ſubſtractio ab horis 14. mutuandæ ſunt horæ 24. integræ diei.

De Aſtronomica multiplicatione.

PVNCTVM III.

MVltiplicatio efformatur cùm cuilibet quantitati totiès applicatur altera quæuis ſit quantitas, quoties habet vnitates, ea, cui altera applicatur, & è conuersò,vndè multiplicatur *6.* per 2. cum toties applicatur 2. ipſi *6.* quotiès habet vnitates numerus *6.* in ſe,hoc eſt vnitates *6.* vel toties numerus *6.* ipſi 2. applicatur quoties habet in ſe vnitates numerus 2. ſcilicet 2. vt clarius in ſequentibus.

	1. 2.				
	1. 2.				
	1. 2.				
6	1. 2.		1	1. *6.*	
	1. 2.		2	1. *6.*	
	1. 2.		1		
Proueniens	12.	aut		12.	Productum.

Quarè multiplicatio nihil aliud eſt, quàm inuentum numeri continentis multiplicandum quoties multiplicans continet vnitatem.

Poteſtquè numerorum quilibet pro multiplicante collocari.

Diſpoſitio numerorum aſtronomicorum, qui multiplicationi deſeruire debent, ſequitur ordinariam, & communem in ſimilibus his.

Ad maiorem facilitatem,ſi in vtroque numero multiplicante,& multiplicando adhærebunt fractionum variæ ſpecies, optimum conſilium erit ad vltimam fractionum ſpeciem ex concurrentibus reducere, vel ambos, aut utrumlibet ipſorum.

Vt cognoſcatur denominatio quantitatum productarum coniungentur apices,aut notæ, & ſigna ſpecierum fractionum, & nota erit ſpecies productæ fractionis, quarè ſi velint multiplicari minuta per ſecundas, noſcetur productum futurum eſſe tertiarum, quia nota min: eſt *I.* & ſecund. *II.* quæ notæ ſimul coniunctæ faciunt *III.* ſignum tertiarum; appoſitumq; eſt gradibus ſignum o. quiá quæcunq; quantitas, quæ multiplicanda eſt, cum gradibus neutiquam ammittit propriam ſpe-

ſpeciei denominationem, & vndè ratio, quarè in his noſtris appoſuerimus gradibus notam. O.

Pro cuius claritate notandum minuta, ſecundas, & tertias &c. facere ſuas diſtinctas ſpecies ab ipſis, & diſtinctè denominatas. Exemplum.

Multiplicanda ſunt min. 35'. 14''.
per min. 30.2''.

Conſilio ſuperiùs dictorum ducenda ſunt min. 30. 2'' in tot ſecundas per multiplicationem 30. per 60. & additionem 2'. & habebuntur ſecundæ 1802. quarè vt infrà 35. 14'.
1802''.

ſubſequetur operatio, multiplicando 14''. per 1802''. per quas fiunt ex dictis 25228. quartæ, ut ex coniunctionibus notarum: hæ quartæ, quoſque poſſibile eſt, diuidantur per 60. ſpecies, & notas productas minuendo, & elicientur ſec. 7'' o''' 28''''. deinde ſimiliter multiplicando 35' per 182'' ſuccedunt in producto 63070. tertiæ, ùt ex notarum additionibus; illæ tertiæ poſſibiliter per 60. diuidantur, & acquirentur min. 17. 31''. 10'''. quæ ſuperioribus addita dant, totum multiplicationis productum min. 17. 38''. 10'''. 28''''.

Etiam hæc multiplicatio fit facilius per reductionem pariter min. 35'. 14''. in ſecundas 2114. quæ multiplicatæ per antecedentes 1802. dant productum 3809428''''. quod poſſibiliter etiam per 60. diuiſum, dictabit min. 17. 38''. 10'''. 28''''.

Per tabulam ſexagenariam appoſitam facilior omnibus modò operatio perfici poteſt, diſponendo ſcilicet quantitates, vt infra poſtea inueniendo in tabula ſexagenaria numeros

Min. 35. X 14''.
Min. 30. X 2.

ſecundarum 2. & 14. hac conditione, vt ſi vnus reperitur in fronte, alter reperiatur correſpondens in latere, & è conversò, & ſic in area patebit numerus adhibendus, ut hic o'''. 28''''. ſi quærantur dicti 2. & 14.

Pars altior in tabulis dicetur caput, aut frons tabulæ, & dextrum, ſiniſtrumquè earum latera.

Appellatur area illud ſpatiolum correſpondens duobus numeris, quorum unus ſit in fronte, & alter in latere, vel è conuersò.

Notæ, & ſigna numerorum inuentorum in area habentur, vt ſuprà expoſitum eſt, ſecundum numeros, qui multiplicantur.

Qua-

Quarè patet ex multiplicatione 2″,& 14″.haberi hoc modo,0‴′ 28‴′.
hoc eſt 0. tert. 28. quart.

Eadem operatio fiat in correſpondentia min. 35′. 14″. & 30′. 2″. ùt 30. cum 35.,30. cùm 14.,& 2. cum 35. eadem methodo, & erit ut ſubſequitur

quitur	Min.	35.	14″.		
	Min.	30.	2.		
			1.	10‴	28‴′.
			7.		
		17.	30.		
productum multiplicationis	Min.	17.	38.	10.	28.

Et ſic in alijs.

De Aſtronomica Diviſione.

PVNCTVM IV.

His ijſdem adnotatis diuiſionis cognitio facilitatur addita hac altera animaduerſione, quòd vbi ſigna fractionum addebantur, ut haberetur ſpecies producti, nunc ſubtrahi debent, vt quotientis ſpecies dignoſcatur, vt ſi diuidenda eſſent min. 17. 38″ 10‴ 28‴′. per min. 30. 2′. (caſus difficilior, & intricatior) reſoluantur, vt ex antecedentibus, propter facilitatem ambæ quantitates in ſuas vltimas ſpecies, vt min. 17. 38″ 10‴ 28‴′. in quartas 3809428. & min. 30. 2″. in ſecundas 1802. per quas dividendæ ſunt quartæ 3809428. Quotiens horum numerorum eſſet ſecundarum ſcilicet 2114. quia detracto ſecundarum ſigno ab eo quartarum, adhuc remanet ſignum ſecundarum, vndè & quotiens min. 35. 14″.

Iſte modus, ut facilior, eſt quoque tutior, cum ſemper vel diuiſor, aut numerus dividendus conſtet unicà, vel multiplici fractionum ſpecie, eamdem regulam admittat.

Alteraque ne deficiat methodus, adnotabitur, quòd quandò quantitas dividenda eſt minor diuiſore, neceſſe erit quantitatem toties multiplicare per 60. donec ei vel proueniat æqualis, ſeu maior, vt ſi diuidendæ ſint ſec. 4. per ſec. 6. maiores opporteret ſec. 4. per 60. multiplicare, ut fierent tertiæ 240″ quæ diuiſæ per ſec. 6. darent quotientem

40′.

40′. min. quia ſublato ſecundarum ſigno ab eo tertiarum, remanet nota minutorum.

At, ſi ſignū quantitatis diuidendæ minus ſit ſigno Diuiſoris, multiplicanda erit quantitas diuidenda toties per 60. quouſq; ſignum ipſius æquale ſit, aut maius ſigno diuiſoris: exemplum afferat diuiſio min. 8. per 4. ſec. quia ſignum dividendi minus eſt altero, ideò ducenda erunt min. 8. in 60. & fiunt 480. ſec. quæ diuiſæ per 4. porrigunt quotientem graduum 120. nàm dempto ſigno ſecundarum à ſigno ſecundarum, remanet ſignum graduum 0. aut alterius ſecundum rem.

Vbi ſignificandum, quod à ſigno minutorum inchoatur numeratio ſignorum, vnde minutorum ſignum ſit minus.

Ex quibus innoteſcit Diuiſionem nihil aliud eſſe quam Inuentum numeri totiès continentis vnitatem, quoties diuiſor, aut diuidens diuidendum menſurat.

Obſecuturus quoquè optatiſſimis *Candidatorum* progreſſibus, placuit quoque, dividendi quemlibet numerum integrum, atque etiam ſi contineat fractiones, per alium quemlibet numerum, & fractiones habentem, ac abſque reſolutione in vltimas ſpecies, vt ſupra dicebatur, modum ſuper addere, qui ſequens eſt.

Primò diuidatur, more ſolito, numerus diuidendus: Secundò: reliquum hinc proveniens multiplicetur ſemper per decem, vtendo regulis multiplicationis de quibus in ſuperiori tertio puncto: Tertiò: producto per hanc multiplicationem addatur figura ſequens in numero diuidendo: Quartò: ità continuetur operatio donec adhibitæ fuerint ſingulæ figuræ omnes, nec non fractiones contentæ in numero diuidendo, & obtinebitur in emanante quotiente quæſita Diviſio.

Pro exemplo, diuidendi ſint gr. 354. m. 49. ſec. 17. per gr. 2. m. 36. ſec. 14.

A BCD E
gr. 2. 36. 14. gr. 354. 49. 17.
Quotiens 136.

2. 36. 14.
23. 46. Reliquum.
10.

3. 57. 40.
5. .

5. 57.

8. 57. 40.
7. 48. 42.
1. 8. 58. Reliquum.
10.

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11. 29. 40.
4. 49. 17.

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16. 18. 57.
15. 37. 24.
41. 33. Reliquum vltimum.

Partitor A. poteſt vnam vicem duntaxàt in B. 3. & ſuperſunt m. 23. ſec. 46.; quæ (adnotatâ priùs vnitate, nempè 1. pro primo numero quotientis) multiplicantur per 10. productumque eſt gr. 3. 57. 40. & ipſis gr. 3. additur numerus ſequens C. ideſt 5. fiuntque gr. 8. 57. 40. in qua quantitate partitor A. poteſt tres vices, tanquàm conſtituens gr. 7. 48. 42., & remanent gr. 1. 8. 58. multiplicandi per 10. eorundemque producto gr. 11. 29. 40. addendus D. 4. cum fractionibus E. 49. 17. & fiunt in totum gr. 16. 18. 57. in quibus partitor A. poteſt ſex vices, efformantes gr. 15. 37. 24., & denique remanent gr. 0. 41. 33., atque colligitur quotiens gr. 136. partiendo igitur gr. 354. 49. 17. per gr. 2. 36. 14. quotiens eſt gr. 136. cum reſſiduo gr. 0. 41. 33.

Facta reſolutione, ut ſupra, gr. 354. 49. 17. ſunt ſecundæ 1276357. & gr. 2. 36. 14. ſunt ſecundæ 9374. factaque per has illarum diuiſione, pariter quotiens eſt gr. 136. remanentibus ſecundis 2493. quæ ſunt m. 41. ſec. 33. & vt ſuprà per ſupputationem abſque reſolutione.

Verùm cum multotiès contingat diuiſionem factam etiam per numerum 9. qui in partitionibus regulariter maximus eſſe ſolet, adhùc quoquè, in hac computi methodo, relinquere reſſiduum partitore majus, hocquè caſu augendus eſt unitate numerus in quotiente poſitus, per cuius multiplicationem habetur reſſiduum, quod per decem multiplicatum eidemque addito ſequenti numero partiendo, adhuc ipſius productum ad partiendum requiritur numerus major nouenariò; & quoniam hinc de neceſſe ſequitur, per augmentum unitatis prędictæ, multiplicatum eſſe diuidendo numero maiorem, ideò præſenti contingentia, ſequens partiendus numerus non eſt addendus reſſiduo, at ipſum reſſiduum ſubtrahendum ſemper eſt ab ipſo ſequenti numero, & remanens multiplicandum eſt more ſolito per decem, ac niſi ca-

ſus

ſus hic adueniat, proſequendus eſt calculus, vt primo loco ſuperius fuit expoſitum: exemplo res clarior fiat: Sint diuidenda m. 1367. per m. 2. ſec. 12. hic partitor in 13. duobus primis numeris numeri partiendi poteſt duntaxàt quinque vices, ſiquidem 2. 12. multiplicati per 5. faciunt m. 11. qui dempti à 13. relinquunt 2. multiplicandum per 10. ſecundùm regulam, & productum eſt 20. cui addendus numerus 6. ſequens in numero diuidendo, fitque ſumma 26. diuidenda per partitorem 2. 12. qui cum poſſit in 26. pluſquàm nouem vices, propterea numerus quotientis 5. augendus eſt vnitate, & faciendus 6. per quem multiplicatus partitor 2. 12. habetur productum 13. 12. à quo demendus 13. numeri diuidendi, & ſuper extant ſec. 12. quæ multiplicatæ per 10. faciunt m. 2. hæcque ſubtracta a 6. ſequenti numero diuidendo, dant in reſſiduo 4. in quo partitor 2. 12. poteſt vnicam tantùm vicem relinquendo 1. 48. cuius multiplicatio per 10. exhibet productum 18. cui addendus ſequens numerus 7. in numero diuidendo, habeturque aggregatum 25. partiendum per 2. 12. Verùm, & cum 2. 12. poſſint in 25. pluſquam nouem vices, ideò & vnitas in quotiente poſita præcedenter, ipſa quoque augenda erit altera vnitate fietque binarium, à quo multiplicatus partitor 2. 12. exhibebit 4. 24. à quibus dempto præcedenti numero 4. differentiæ inter 2. & 6. vt ſuprà, habebitur reſſiduum 24. quod multiplicatum per 10. tradit productum 4. ſubtrahendum à 7. vltimo numero quantitatis partiendæ remanentque 3. & in hoc partitor vnicam ſolùm vicem poteſt relinquendo reſſiduum 0. 48. Quarè partiendo m. 1367. per m. 2. 12. quotiens erit 621. remanentibus ſec. 48. & ecce totam calculi formam.

ABC

2'. 12'' —— 1 3 6 7.

Quotiens 5.—61.—621.

11. 0.

2. 0.

10.

20. 0.

6. ſequens numerus

26. 0.

19. 48.

B

	6. 12.	reſſiduum maius diuiſore.
Ideo 5. mutatur in	6.	qui
multiplicatur per	2. 12.	
fiuntque	13. 12.	
à quibus ſubtrahitur A.	13. —	
& remanent	0. 12.	
multiplicandæ per	10.	
Productum	2. 0.	
Demitur à B.	6. —	
reſtant	4. 0.	E.
Ju quibus partitor	2. 12.	per vnam tantùm vicem
ſuperſunt	1. 48.	
Factâ multiplicatione per	10.	
Productum	18. 0.	
Additur C.	7.	
Summa	25.	in quam Diuiſor poteſt plùs,
quàm nouem vices, hinc	1.	
augetur ad	2.	
& multiplicantur per	2. 12.	
eſtque productum	4. 24.	
à quo ſubtrahendus E	4.	
ſuperextant	0. 24.	
multiplicandæ per	10.	
& fiunt	4. 0.	
ſubtrahenda à C.	7. 0.	
remanent	3. 0.	in quibus
partitor	2. 12.	vnicâ tantùm vice
ſuperſuntque	0. 48.	

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Probatio.

	621.	621.	
	12.	2.	
	1242.	1242.	
	621.	124.	12''
			48. remanentes vt ſuprà
60)	7452.		
	124' – 12''		
	ABC.	1367.	0.

Quartum proportionalem inuenire ex tribus numeris cognitis.

PVNCTVM V.

QVartus numerus proportionalis inuenitur maximè per vulgatam regulam, ab aliquibus appellatam regulam trium, ab alijs auream, à nonnullis quatuor proportionalium, cuius vnius ſcopus nullus alter eſt, quàm datis tribus numeris quartum proportionalem, de quibus proportionalibus doctrinam exhibet Euclides ſecundùm Clauium lib. 5. definitione 6.& 7., inuenire. Sint igitur tres aſtronomicæ quantitates, cum aſtronomica pertractentur, ex. gr. 40. min.& ſec. 56. pro prima,& pro ſecunda min. 58. 24. ſec.,& pro tertia min. 20. ſec. 30.,& debeat quarta proportionalis inueniri; Modus ſemper idem eſt; ſatis enim eſt ſecundam, & tertiam quantitatem multiplicare, & productum ſemper diuidere per primam, quarè multiplicentur min. 58. ſec. 24. per min. 20. ſec. 30. ſecundùm ſuperiora, & per reductionem ad ſecundas ob maiorem facilitatem, eritq; productum quart. 4309920. quòd diuiſum per primam quantitatem ſuppoſitam min. 40. & ſec. 56. aut ſec. 2456. dabit quotientem ſec. 1754., & $\frac{2096.}{2456.}$ A, B. vel ſec. 1755.

poteſt enim fractio quælibet pro integro ſumi, cum numerator A. attingit, vel excedit dimidium denominatoris B.

Quæ ſecundæ 1755. ſunt quæſita min. 29. ſec. 15. & quarta quantitas proportionalis.

Quæ regula eſt omnibus caſibus vniformis.

Alter etiàm modus adeſt pro ſimili operatione, hoc eſt diuidendo primam per tertiam, vel tertiam per primam quantitatem maiorem ſcilicet per minorem, & quoties tertia illarum primam continebit tot de ſecunda ſumantur quantitates, & productum quartam proportionalem indicabit, & quoties prima continebit tertiam tot partes auferantur ſecundæ: vt in exemplo: in quo prima, per tertiam quantitatem, quia prima eſt maior, diuiditur, & per diuiſionem noſcitur min. 20. ſec. 30. videlicet ſec. 1230. ſemel menſurare min. 40. ſec. 56. aut ſec. 2456. reliquo numero $\frac{1226}{1230}$ quamobrem ſecunda quantitas dimidianda eſt, & habebuntur min. 29. 12. aut ſec. 1752. quæ eſſent quartus proportionalis numerus, ſi tertius præciſè bis contineretur in primo, ſed quia adeſt aliquis exceſſus, ideò ipſe per numeratorem multiplicatur, & per denominatorem diuiditur, & Quotiens 4''. additum ſec. 1752. dat ſec. 1756. quarti numeri proportionalis.

Et per has regulas eliciuntur partes proportionales, vt exponitur in ſequenti haberi per tabulam ſexagenariam, cum trium numerorum cognitorum primus, eſt 60. pro quo ea tabula dicitur ſexagenaria.

De Parte proportionali directa, & conuerſa.

PVNCTVM VI.

EXtrahere partem proportionalem eſt inuenire partem competentem aliquibus partibus, quæ ſimul omnes aliquam conſtituunt differentiam, vt ex. gratia parres facientes differentiam hanc 30. minutorum ſunt 60. minuta, quæritur quanta pars eorum 30. minutorum congrueret 15. minutis illarum partium 60. & ſic diceretur inuenta proportio 7. minutorum, & 30. ſecundarum pro proportione, & parte competenti illis 15. minutis illius differentiæ 30. minutorum, quæ proportio inuenta eſt cum tabula ſexagenaria, quam ingreſſus cum 30. minutis in capite, aut in latere tabulæ, & min. 15. etiam, vel in capite, ſeu in latere, cum hac animaduerſione, quod ſi vnum quæritur in latere quæri debet aliud in capite, inuenio partem proportionalem min. 7' & ſec. 30''.

Mihi liceat, pro captu meliori, dicere quod ſit directa proportio, cum numerus lateralis exhibet differentiam totam arealis, vnde pri-

mus

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mus numerus eſt in regula trium, & quod ſit conuerſa proportio, cum numerus arealis exhibet differentiam totam lateralis, vnde primus eſt in aurea regula: nam ſic expoſita methodo directæ proportionis viceuerſa exponendum erit, quomodo, ſi alicuius partis differentiæ detur numerus, extrahatur pars competens tantæ differentiæ, cum iam ea differentia fiat à multis illarum partium ſimul ſumptis, vt ex. gratia detur declinatio gr. 8. min. 7. cum in tabula declinationum inueniam declinationem gr. 8. 7′ eſſe inter gr. 20. & 21. ♈. neceſſe eſt, quod dicam vni illorum ſexaginta minutorum, quæ ſunt inter gr. 20. & 21. ♈ competere tantam declinationem; vt igitur inueniam quale minutum ſit cui competat tanta declinatio, ſubtraho appoſitas declinationes minorem à maiori, & earum proſilit differentia ſemper, vt rectius, in fronte tabulæ ſexagenariæ inuenienda, deinde ſubtraho minorem declinationem à declinatione, cuius minutum debeo nanciſci, & fit vna pars differentiæ, ſemper ſub differentia in fronte tabulæ habita, deſcendendo inuenienda, nam ſub tali differentia, & parte differentiæ in latere prodibunt quæſita minuta, & faciendo rurſus dictam operationem, etiam obtinebuntur ſecundæ, &c. vt in hoc caſu differentia declinationum eſt min. 23. quam quæro in fronte tabulæ ſexagenariæ, & pars differentiæ eſt min. 17. nam ſubtracta minori declinatione gr. 7. 50. à declinatione gr. 8. 7. remanent min. 17. partis differentiæ, nam tota in eodem differentia eſt, min. 23. quam partem differentiæ min. 17. deſcendendo ſub min. 23. totius differentiæ, video mihi dare in latere, accipiendo proximè minus, minuta 44. eſt enim numerus proximior min. 17. ille min. 16. 52″ & cùm velim etiam ſecundas excerpere ſubtraho min. 16. 52. à min. 17. & fiunt ſec. 8. & quæ inuentæ deſcendendo ſub 23. dant in latere ſequentem numerum minuta, nempè ſecundas 21. proximè maiores, cùm tertiæ negligantur. Si quis autem vellet proſequi operationem aſſumat numerum proximè minorem, quem ſubtrahat à ſec. 8. nam pars differentiæ dabit tertias, & hac methodo procedendo etiam quartas, &c. In noſtro caſu numerus quæſitus ſub differentia min. 23. qui ſit proximè minor ſec. 8. eſt ſec. 7. & ter. 40″, quæ ſubtractæ à ſec. 8. dant 20. tertias, quæ rurſus quæſitæ ſub. 23. dant proximiores 19. tertias, & 56. quartas quæ in latere demonſtrant ter. 52. &c. vndè competeret declinatio grad. 8. 7′. gradibus 20. min. 44. ſec. 20. ter. 52. &c. ♈ vel ♎

De.

PVNCTVM VII.

COnuenit methodus extractionis radicum ex numeris vulgaribus, cùm eâ ex numeris Aſtronomicis, vndè ſi propoſita ſit quælibet quantitas Aſtronomicorum numerorum, ſat eſt, ſi ea reducatur ad minimam ſpeciem, ſi opus ſit, & procedatur poſtea, vt vulgariter.

Radicis extractio eſt inuentum numeri ex numero propoſito, qui neceſſariâ multiplicatione producat numerum propoſitum.

Pro extractione radicis quadratæ ſimiliter fit ſignatio figurarum, incipiendo à dextra, ſolùm in locis imparibus; pro quo ſit extrahenda radix quadrata ex gr. Gr. 4. m. *59*. ſec. *16*. ſummâ ſec. *17956*. ſignatio inchoatur à *6* per loca imparia, & inuenitur Radix 134. quia numerus 134. in ſe multiplicatus, per eumdem 134. conſtituit *17956*. quare Radix gr. 4. *59'*. *16''*. eſt min. 2. ſec. 14.

Sic methodus in numeris Aſtronomicis extrahendi radices vndique ſequitur communem, & in extractione radicum cubicarum in ſignando prætermittuntur duæ figuræ, & in alijs extractionibus ſecundùm ſuos ordines ommittuntur tres, quatuor, quinque figuræ, &c.

De probationibus harum Aſtronomicarum operationum.

PVNCTVM VIII.

PRobatio ſummarum Aſtronomicarum habetur per ſubtractionem cuiuslibet ſeriei numerorum à ſumma, debet enim prouenire quæ numerorum ſeries ſubtracta non eſt, vt ſi in exemplo A, in puncto primo, ſeries B, ſubtrahatur à ſubſequenti ſumma debet reſultare altera C, & è conuerſo.

Probatio ſubtractionum per ſummam concluditur, addendo ſcilicet reſiduum, aut differentiam cum ſerie ſubtracta, debet enim prouenire ſeries, à qua altera dempta fuit, vt in puncto 2. & exemplo E, addendo ſeriem numerorum F. cum differentia, debet reſultare G.

Probatio, optimè factæ multiplicationis concluditur, cum ex diuiſione producti, per multiplicantem, aut multiplicatum alteruter exit, hoc pacto, vt ſi per multiplicantem fiat diuiſio ſit in quotiente multiplicatus, & è contrà.

Probatio diuiſionis habetur per multiplicationem, cum enim multiplicatum quotiens per diuiſorem reddet productum diuiſum, operatio fortunatè facta erit.

An

An benè inuenta fuerit quarta quantitas proportionalis cognoſcetur ex eo, quod producto extremarum quantitatum multiplicatarum debet eſſe æquale productum mediarum pariter multiplicatarum; vt in exemplo allato in puncto 5. quo inuentæ habentur ſequentes quatuor proportionales.

A	B	C	D
40. 56''	58' 24''	20' 30'	29' 15''
1.	2.	3.	4. propor.

multiplicetur C, in B, aut è contrà, atque ſi eorum productum erit æquale producto ex A, & D, operatio non erit erronea.

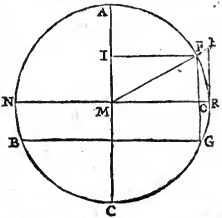
Deniquè probatio, an benè Radices extractæ fuerint proſilit ex multiplicatione numeri in ſe, & ſecundùm naturam Radicis, nam pro quadrata ſatis eſt in ſe Radicem multiplicare, debetquè in cubica quadratum per propriam Radicem multiplicari &c.

Trigonometriæ Definitiones.

PVNCTVM IX.

Trigonometria importat ſcientiam per quam habetur methodus ſciendi menſuram triangulorum.

A' triangulis appellatur trigonometria, vel Sphærica, vel plana: Sphærica, cum triangula ſunt ſphærica, hoc eſt componuntur à portionibus circuli, & plana cum triangula conſtant ſolum lineis rectis.



Diametri N M. vel M R. dicuntur etiàm radij circuli, vt potè à circumferentia ad centrnm, & radius etiam eſt ſemidiameter cuiuſcunque circuli, & eſt maximus omnium ſinuum hoc eſt ſinus graduum 90. Qui vocatur ſinus totus, aut ſinus integer vt quadrantis A R. ſinus maximus, totus, vel integer eſt A M.

Chorda, ſeu ſubtenſa eſt linea recta intrà circulum ducta, & vtrinque terminata in circumferentia ſecando circulum in duas inæquales portiones vt B.G. & F.G. diuiditque corda F. G. circulum in duas

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duas partes inæquales minorem ſcilicet F. R. G. & maiorem F.B.G. &c. & vocatur ſubtenſa quia ſtat ſub portione circuli.

Sinus eſt dimidium, ſemiſſis, vel medium chordæ incidens in diametrum perpendiculariter, & diuidit ſemicirculum in duo inæqualia ſegmenta vt F. O. eſt ſemiſſis chordæ F.G. quæ à puncto arcus F. incidit perpendiculariter in diametrum N.R.& diuidendo ſemicirculum A.N. R. in duo inæqualia ſegmenta minus F.R. & maius F. N.

Sinus vel eſt rectus, vel eſt verſus.

Sinus rectus aut ſimpliciter conſideratur, vel conſideratur, vt reſiduum, vel complementum ad quadrantem circuli hoc eſt,gr.90. Sinus ſimpliciter erit vt F. O., & ſinus complementi F. I.

Sinus verſus dicitur illud radij ſegmentum, aut ſecundum antiquos ſagitta, videlicet recta linea, quæ in ſemicirculo ab altero arcus termino ducitur perpendicularis ad ſinum rectum vt O. R.

Tangens eſt recta circulum tangens in extremo arcus inter punctum contactus,& productam à centro per aliud extremũ intercepta,vt E R.

Secans dicitur intercepta linea inter centrum circuli, & tangentem, tranſiens per extremum arcus,in quo non ſit contactus, vt eſt M. E.

Quod dicitur de ſinibus, tangentibus,& ſecantibus arcuum,dicitur etiam de angulis ſubtenſis earumdem, vt quod dicitur de tangente E. R. quod habeat menſuram, cum arcu F. R. dicitur quoque de angulo F.M.R. quia menſuratur ab arcu F. R. nam Anguli cuiuſuis plani rectilinei menſura, ſeu quantitas eſt arcus circuli ex angulari puncto ad quoduis interuallum deſcripti inter anguli crura comprehenſus, & ſic patet arcum F.R. eſſe menſuram anguli F.M.R. atque ſi arcus F. R. erit ex. gr. gr. 30. erit & angulus F. M. R. gr. 30.

Pro complemento arcus, aut anguli intelligendum erit reliquum arcus, aut anguli, qui ſit minor gr. 90. ad quadrantem, & eoſdem gr. 90.

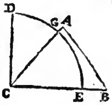
Prò ſupplemento arcus, aut anguli intelligendum erit reliquum arcus,aut anguli, qui ſit minor gr.180.ad ſemicirculum,& eoſdem gr.180

Radius, facilitatis gratiâ, ſupponi ſolet continere particulas 10000000. vel plus, vel minus, ſic ſemidiameter A. M. vel alter quilibet in alio quolibet circulo poteſt ſupponi continere dictam quantitatem particularum.

Quo noto, qualium ſemidiametur A.M. eſt ex. gr. 1,000, 000,000, 000, competens gradibus 90. talium ſinus F. O.,ſi arcus F. R. ſupponatur eſſe graduum 60., erit 866,025,403,784.

Cognita, vel data dicitur aliqua, etiam angularis quantitas, quam men-

menſura aliqua metita eſt, & ità dicentur cognita, aut nota, vel data latera planorum triangulorum, cum ſcimus quot ſint pedes, vlnæ, paſſus decempedæ, &c. ſimiliter angulus appellabitur notus quandò ſciemur gradus, & fractiones ſic per aliquam menſuram cognitas continere; quod vt melius pateat: debeat menſurari diſtantia inter duo puncta A. B. quæ ſint, vel Columnæ, vel Turres &c. ſit in C. menſurator, qui indigeat ſcire quantitatem anguli A. C. B. tunc poterit ſumi Quadrans, vt C.E.D., qui adaptatus vt in figura per arcum G.E. demonſtrabit quãtitatem anguli G.C.E, qui ex hac operatione dicetur cognitus, quia quantus erit arcus, tantus erit angulus G.C.E. & erit cognitus arcus G.E. per diuiſionem factam Quadrantis D. G. E. in partes 90. ac, ſi poteſt, in ſuas minutias.



In triangulis rectangulis ſpeciatim latus oppoſitum angulo recto appellatur Hypothenuſa, & reliquæ lineæ trianguli latera.

In triangulis Iſoſcelijs latus, quod non eſt æquale alijs duobus appellabitur baſis, & appellabuntur aliæ duæ lineæ æquales, latera.

In triangulis Scalenis altera trium linearum poteſt appellari ad libitum baſis, & aliæ duæ latera; angulusque baſi oppoſitus dicetur angulus verticalis.

Quomodo ſupputentur ſinus arcuum habetur ex Elementis Euclidis geometricis ſuppoſito, quòd circuli dimetiens, A. C. vel N. R. intelligatur diuiſa in partes mathematicas, vt ex. gr. in particulas 2, 000, 000, 000, 000, & ita qualium dimetiens ſtatuetur talium exagoni latus circulo inſcripti, per 15 quarti, erit 1,000, 000, 000, 000, nam ibi demonſtratur quòd latus exagoni circulo inſcripti eſt æquale radio, & radius ſemiſſis eſt diametri, vndè dimidiata ſuppoſita quantitate diametri 2,000. 000, 000, 000, noſcetur menſura dicta radij, & latus ſexanguli ei æquale.

Per ſextam quarti verum eſt, quòd Recta quadrantem circuli ſubtendens eſt latus Quadranguli circulo inſcripti, ſed ea poteſt, per penultimam primi, duplum radij, ergò potentia quadranguli eſt 2.000. 000, 000, 000, 000, 000, 000, 000, & eius latus huius radix 1, 414, 213, 562, 372.

Pariter, per 16. quarti, latus quindecanguli eſt 415, 823, 381, 634. vbi conſtat, quòd recta inſcripta inter baſim trianguli, & Quinquanguli ab eodem puncto in circulum ducti eſt latus quindecanguli.

Per nonam decimitertij, latus decanguli eſt ſegmentum minus rectæ lineæ extrema, & media ratione ſectæ latus ſexanguli, & decanguli ſimul menſurantis, quarè, per vndecimam ſecundi, ablato ſemiradio ex latere quadrato radij, & ſemiradij aggregato elicitur latus decanguli 618, 033, 988, 748, &, per ſequentem, latus quinquanguli in circulo inſcripti poteſt latus ſexanguli, & decanguli; at latus ſexanguli eſt part. 1,000, 000, 000, 000, & decanguli 618, 033, 988, 748, itaq; per primi penultimam, latus quinquanguli eſt 1, 175, 570, 504, 584.

Per duodecimam eiuſdem latus trianguli circulo inſcripti potentia eſt triplum radij, ſed radius eſt part. 1, 000, 000, 000, 000, ergò huius potentia triplicata eſt. 3, 000, 000, 000, 000, 000, 000, 000, 000, & exindè latus trianguli. 1. 732. 050, 807, 568.

Facto hoc apparatu, & Trianguli, Quadranguli, Quinquanguli, Sexanguli, Decanguli, etiam & Quindecanguli laterum aſſumptis ſemiſſibus, vt angulorum dimidiorum ſinibus, & ex his ſingulorum complementorum, & ſemiſſum ſinibus continuè inueſtigatis tota ſinuum tabula poterit adaptari.

Horum ſemiſſes, vt ſinus angulorum dimidiorum.

Graduum.	60.	866, 025, 403, 784.
	45.	707, 106, 781, 186.
	36.	587, 785, 252, 292.
	30.	500, 000, 000, 000.
	18.	309, 016, 994, 374.
	12.	207, 911, 690, 817.

Poſtea horum graduum aſſumantur complementa, & ſemiſſes continuæ, & illorum, & harum aſſumantur ſinus, & ſic innoteſcent ſinus pro toto quadrante, & pro hoc addiſcendum primò quomodo arcus alicuius, cuius notus ſit ſinus rectus, habeatur ſinus verſus.

Sinus verſus elicitur cum minor eſt gr. 90. adnotando complementum noti arcus, & huius capiendo ſinum, hic enim demptus à radio ſuppoſito circuli relinquet ſinum verſum quæſitum ex. cau. quæratur ſinus verſus gr. 18.; horum complementum ſunt gr. 72., quorum ſinus eſt. 951, 056, 516, 295, & hic ſubtractus à toto ſuo radio 1. 000, 000, 000, 000, dictat ſinum verſum arcus gr. 18. ſinum 048, 943, 483, 705, ſed pro gradibus ſupra Quadrantem, vt gr. 96. adnotetur exceſſus ſupra gr. 90. hoc eſt gr. 6. & horum capiatur ſinus rectus 104, 528, 463, 367, cui additus ſinus totus 1, 000, 000, 000, 000, largitur ſinum verſum 1, 104, 528, 463, 267, pro gr. 96.

Hoc

Hoc cognito,ſi dematur quadratum ſinus noti ex quadrato radij, remanebit quadratum ſinus complementi, cuius inuenta Radix erit ſinus rectus quæſitus.

Poſtea cuiuſcumque arcus recto, & verſo ſinu noto, reperietur eius ſubtenſa, & rectus ſinus arcus dimidij per id, quòd Radix quadrati recti ſinus, & verſi peripheriæ, huius ſubtenſa eſt, & ſemiſſis eſt ſinus rectus arcus dimidij eiuſdem circumferentiæ.

Semiſſes deductæ ex arcu part.30. & earum ſinus.

	30.	500,000,000,000.	
	15.	258,819,045,102,	
Arcus dimidij	7.30.	130,526,192, 220.	Sinus.
	3.45.	654,031,292,301.	

Horum arcuum complementa, & Sinus.

75.	965,925, 826.289.
82.30.	991,444,861,373.
86.15.	997,858,933,238.

Poſtea horum complementorum aſſumantur ſemiſſes, vt gr. 37. 30. gr.41. 15.gr. 43.7. 30.& per hoc, & aliorum medium continuum ſinus omnes complebuntur.

Cognitis ſinibus facile eſt inuenire tangentes,& ſecantes; ſit enim in ſuperiori Shemate M centrum circuli, cuius radij M R, & M F, intercipientes arcum F R, nec non M F,& A M, intercipientes arcum F A, qui eſt complementum arcus F R, vt ſcilicet arcus totus A F R, ſit gr. 90. & ducantur F O, & FI, perpendiculares ad M R, & A M. Quia angulus A, M R, eſt rectus, erit etiam quadrilateri I F M O, angulus I F O, rectus, & figura quadrilatera erit parallelograma rectangula cuius oppoſita latera I F, M O, æqualia, pariter I M, F O, æqualia, & ſunt I F, FO, vel M O, O F, ſinus arcum A F, F R, his datis inuenietur arcus F R, tangens R E, & ſecans M E, ſi fiat vt M O, ad O F, ita M R, radius ad aliud, quod erit quæſita tangens R E. Quæratur tangens gr. 30. Sinus gr. 30. eſt 500,000,000,000, hic per totum radium multiplicatus facit productum 500,000,000,000,000,000,000,000, quod diuiſum per ſinnm gr.60, ſinum complementi 866,025,403,784, facit quæſitam graduum 30.tangentem 577,350,269,189.

Similiter ſicut O M, ſinus arcus A F, ad M F radium, ita fiat radius M R, ad quæſitam ſecantem M E, Quæratur ſecans gr. 30. Quadratum

ſupra radij ſuppoſiti eſt 1, 000, 000, 000, 000, 000, 000, 000, 000, & complementum gr. 30. ſunt gr. 60. horumque ſinus rectus 866. 025, 403. 784. & per hunc diuiſum quadratum radij tribuit quotientem, & gr. 30. ſecantem ME, 115. 470. 054 993.

Vel procedatur per 47. primi Elem. Euclidis, cum cognita ſit altera harum: & ita pro inuenienda tangente ſubducatur quadratum radij à quadrato Hypothenuſæ ſecantis, & remanebit Quadratum, cuius Radix erit quæſita tangens. Pro ſupputanda ſecante, iungantur ſimul quadratum radij, & quadratum tangentis, nam aggregatum erit quadratum quæſitæ ſecantis.

Et ex his, atque alijs plurimis apparet quantum vtilitatis afferant Euclidis Elementa, & quantum virtutis poſſideat qui ea bene poſſidet.

Inuentis ſinibus, tangentibus, & ſecantibus, ijs aptari poſſunt ſui logorithmi, nedum numeris abſolutis, ſed etiam relatiuis ad arcus circuli, ſcilicet ſinibus, tangentibus, & ſecantibus vt calculator vtrâque trigonometriâ hoc eſt lineari, & logorithmica vti, & potiri poſſit, vt plurimi impreſſerunt.

De Logorithmis.

PVNCTVM X.

Logorithimi ſunt numeri, qui proportionalibus adiuncti æquales ſemper ſeruant differentias: aut Logorithmus nihil aliud importat, quam rationem, quam habet vnitas ad numerum determinatum, vt exempli gratia Logorithmus numeri 6845. eſt 38353735. & tanta eſt ratio numeri 6845. ab vnitate.

Logorithmi ſunt numeri artificiales, quorum proprium eſt multiplicationem conficere per ſummam, & diuiſionem per ſubtractionem, vt hic.

Exemplum multiplicationis per ſummam.

9876

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9876. ——.——.—— Logorithmus 3. 9945811.
9748. ———— Logorithmus 3. 9889155.

79008		79834966. Summa
39504		
69132	Competit numerus	96271248.
88884		

Prod. 96271248.

Exemplum diuiſionis per ſubtractionem
diuidendus
Diuiſor 9876—96271248. —— Logorithmus 79834966.
Quotiens 9748.

Diuiſor 9876. Logorithmus 39945811. Subtr.
Quotientis Logarithmus 39889155.
Competit numerus 9748. Quotientis.

Pro inueniendo quarto proportionali numero, logorithmi ſecundi, & tertij adduntur, & à producto ſubtrahitur logorithmus primi, & fit logorithmus numeri quarti proportionalis. Quæratur quartus proportionalis horum numerorum 15. 45. 60. quorum logorithmi ſunt.

60		17781512.
45	Logorithmi	16532125.
	Log	34313637.
15	Logorithmus ſubtr.	11760913.
Logorithmus num. 180.		22552724.

quarè numerus 180. eſt quartus quæſitus proportionalis.

Cuiuſcumque numeri radix habetur dimidiando, vel diuidendo per 3. aut 4. &c. logorithmum numeri cuius quæritur radix: dimidiatur ſi velit radix quadrata, diuiditur per 3. ſi cuba &c. Quæritur quadrata radix numeri 99980001. cuius logotithmus eſt 7. 9999132. diuidatur per 2. iſte logorithmus, & fiet 3. 9999566. cui datur numerus radicis quadratæ queſitæ 9999. Quæritur radix cuba num. 27. Huius logorithmus 1. 4313638. partiatur per 3. & fiet 0. 4771213. cuius numerus 3. quæſitam radicem cubam demonſtrat, ſi enim 3. in ſe multiplicetur fiet 9. qui etiam multiplicatus per ſuam radicem videlicet 3. reſtituet propoſitum 27.

Logo-

Logorithmi ſolent inueniri per tabulam, nam ſummopere laborioſum eſt ipſorum conſtructioni operam dare.

Hæc haberi poteſt, ſumendo exemplum logorithmorũ communiter receptorum, & per diſpoſitionem proportionaliũ numerorum qui rotundi appellari ſolent, eorum enim ſunt noti logorithmi, vt ſequitur.

Numeri		Logorithmi cogniti per ſuppoſitionem.	
1	———	000000	vel ſimiliter
10	———	1. 000000	
100	———	2. 000000	
1000	———	3. 000000	
10000	———	4. 000000	
100000	———	5. 000000	
1000000	———	6. 000000	& ſic in infinitum.

Vbi notabile eſt quod ille numerus ab alijs ſeiunctus vocatur Characteriſtica, quæ ſemper minor eſſe debet vnitate ijs figuris, quibus numerus naturalis conſiſtit, illius ſcilicet nnmeri cuius logorithmi characteriſtica eſt.

Cœteros non cognitos logorithmos ſupputare neceſſe eſt ſecundum ſtatum cognitorum, quia ſi ex. gratia logorithmus denarij eſt 1 000000. & vnitatis 000000. logorithmus numeri 3. 16227. medij geometrici inter 1. & 10. erit 5000000. & rurſus quia medium proportionale inter numerum 3. $\frac{162278}{1000000}$, & vnitatem eſt 1. $\frac{77828}{100000}$ huic ideo competit logorithmus 2500000, quare logorithmus binarij eſt maior logorithmo 2500000. & minor 5000000. denuo per hos cognitos logorithmos poteſt innoteſcere logorithmus binarij logorithmo proximus, & ita vt nihil aut parum diſcrepet ab ipſo, quamobrem poteſt rurſus quæri medium hoc proportionale inter 1. $\frac{77828}{100000}$, & 3. $\frac{142278}{1000000}$, quod eſt Radix 2. $\frac{37137}{100000}$, cuius logorithmus erit 3750000. maior eo numeri binarij propter exceſsum fractionis $\frac{37137}{100000}$ ſupra 2. & ſic poterit viciniora per extrema reiterari operatio donec aſſequatur medium proportionale nonnihil diſcrepans à binario, vt ex ſequentibus facile colligitur.

Ex-

Extrema.	Medium geometricum.	Logorithmus.
1 10	1 3.162378.	.0500000
1. 3.162278	2 1.778279.	.0250000
1.778279 3.162278	3 2.371374.	.0375000
1.778279 2.371374	4 2.053525.	.0312500
1.778279 2.053525	5 1.910953.	.0281250
1.910953 2.053525	6 1.980957.	.0296875
2.053525 1.980957	7 2.016915	.0304689
2.016915 1.980957	8 1.998855.	.0300781
2.016915 1.998855	9 2.007864.	.0302734
2.007864 1.998855	10 2.003354.	.0301758
2.003354 1.998855.	11 2.001103.	.0301270
2.001103 1.998855	12 1.999979.	.0301025
2.001103 1.998855	13 2.000541.	.0301148
1.999979 2.000541	14 2.000259.	.0301087

Extrema.		Medium geometricum.	Logorithmus.
1.999978	——	15	
2.000259		2.000119.	.0301055
1.999978	——	16	
2.000119		2.000044.	.0301040
1.999978	——	17	
2.000044		2.000011.	.0301033
1.999978	——	18	
2.000011		1.999995.	.0301029
1.999995	——	19	
2.000011		2.000003.	.0301031
1.999995	——	20	
2.000003		1.999999.	.0301030

Hoc loci ego termino operationes, quia medium geometricum 1. $\frac{999999}{1000000}$ parum diſcrepat ab identitate binarij, & colligo huiuſce numeri Logorithmum eſſe 0301030. & ſimiliter pro inuento ignotorum logorithmorum alijs numeris competentium, procedet ſupputatio.

Cognito Logorithmo alicuius numeri erunt etiam cogniti logorithmi aliorum numerorum, qui conſtent eo numero cuius logorithmus cognitus eſt, vel in ſe ipſum multiplicetur, vel per alium, hoc tamen caſu debet etiam noſci logorithmus alterius numeri concurrentis ad multiplicationem. Regulæ ſunt: pro habendo logorithmo quadrati alicuius duplicabitur logorithmus cognitus radicis, & ex ſumma patebit logorithmus cognitus numeri propoſiti quadrati, ex. gratia: quia notus eſt logorithmus binarij non latebit logorithmus quaternarij vt potè quadrati numeri binarij, duplicando logorithmum binarij, vt fiat quaternarij logorithmus o. 602060.

Triplicando logorithmum cognitum cognoſcitur logorithmus numeri cubi, vt triplicando logorithmum binarij o. 301030. fit logorithmus o. 903090. numeri 8, qui eſt cubus binarij.

Sic quadruplicando, quintuplicando, &c. cognoſcuntur logorithmi aliorum numerorum, quorum eſt radix altera numerus, cuius eſt cognitus logorithmus.

Conuertitur methodus, pro inueniendis radicum logorithmis, diuidendo,

dendo, per 2. vel 3. vel 4. &c. habitum logorithmum ſecundum ſpeciem radicis, vt ſuprà.

Repertis logorithmis num. 2., & 8. per horum additionem patebit logorithmus num. 16. hoc eſt 1. 204120., & per huius duplicationem logorithmus numeri quadrati, cubi &c. eiuſdem 16.

Per ſummam quoque logorithmorum num. 2. 4. 16. noſcitur logorithmus num. 128. qui fit ex ductu num. 2. in 4., & ex ductu num. 8., qui fit ex 2. in 4., per 16.

2.	0.301030
4.	0.602060
16.	1.204120
	2.107210 Logorithmus num. 128.

A lege multiplicationis habetur, quod ſemper eadem eſt ratio vnitatis ad multiplicantem, quæ eſt multiplicati ad factum, & patet per ipſam logorithmorum definitionem logorithmos proportionalium eſſe æquidifferentes: igitur logorithmi primi, & quarti numeri, hoc eſt vnitatis, & facti æquabuntur logorithmis ſecundi, & tertij, & quia logorithmi vnitatis, & facti æquabuntur logorithmo facti, ideo hic logorithmus æquabitur logorithmis facientium, vt

	1	0.000000.
Factores	2	0.301030.
	4	0.602060.
Factus	8	—0903090. Summa.

Pariformiter logorithmus numeri diuiſi æquatur logorithmis diuiſoris, & quotientis, vt ſi quæreretur quoties 4. menſuret 128., qui ab eo 4. menſuratur 32. vicibus,

	1	0.000000.
Diuiſor	4	0.602060.
Quotiens	32	1.505150.
Diuiſus	128	2.107210.

Propoſitio vigeſima nona, Theorema tertium, quod ſcripſit Excellentiſſimus Vir. *P. Claudius Franciſcus Milliet de Chales* Tom. 1. ſui Mathematici Curſus lib. 2. Trigonom: agens de logorithmis, & quod ſic ſe habet.

Si

Si aliquis numerus minor binario, & maior vnitate in Denominatore ſuæ fractionis quindecim cyphras habeat antequam numerator aliquam habeat, & huius numeri radix quadrata extrahatur, dicoquod numerator fractionis huius primi numeri duplus erit numeratoris fractionis Radicis ſuæ:

Atquè cuius exemplum facit in hoc numero:

$$.1.\ \frac{25563829864006470.}{100000000000000000000000000000000.}$$

Vtiquè de quam proximiſſimo verum eſt, & ad eruendos logorithmos, optimè, ac maximè accommodatum.

Defficientia enim in vltima particula, quæ ſemper inuenietur in Numeratore Radicis à propoſito numero, minori binario, ac vnitate maiori, extractæ, nullum poteſt ſenſibilem errorem proferre.

Verùm enim verò Theorema non eſt ſingulare in expoſito numero, at generale vbicunque Denominator habebit tot cyphras, quæ ſint duplæ, quoad numerationem, ſignificatiuarum notarum in Numeratore, vt ſi ex. gr. Numerator habeat vnicum numerum, Theorema procedit, ſi Denominator duas habeat cyphras: Si Numerator duos numeros, dum Denominator cyphras quatuor; huiuſmodi ſi Numerator tres notas, quando Denominator ſex cyphras, & ità in infinitum.

Quarè immutatio primi numeri in eodem Theoremate, in hunc alterum, ibidem notatum littera L. 25568298640064700. non ex errore Typographi, ſed ex luſu, atquè datâ Operâ, ipſius P. Milliet.

Meliùs tamèn ad captum faciliorem, ſi in minoribus numeris ſpeciem feciſſet, vt hìc ſubnectitur.

Atquè ſint numeri vnitate maiores, ac binario minores: A.

$$A.\ 1.\frac{6}{100.}\ \text{———}\ 1.06.\ ℞\ \frac{1.02.}{2.02.}\ \frac{196.}{202.}\ \text{quàm proximiſſima.}$$

1

006.00

404

196.

A. 1. $\frac{44}{10000}$ —— 1.0044 ℞ 1.0021 —— $\frac{19559.}{20041.}$

1. · · · 2.002.
0004400. 2.0041.
4004.
39600.
20041.
19559.

A. 1. $\frac{234:}{1000000}$ —— 1.000234 ℞ 1.000116. —— $\frac{1986544.}{2000226.}$

1. · · · 2.0001.
000023400. 2.00021.
20001. 2.000226.
·339900.
200021.
13987900.
12001356.
·1986544.

12781914932003235.

B. 10000000000000000025563829864006470.

. . . .

17. 16. 15. 14. 13. 12. 11. 10. 9. 8. 7. 6. 5. 4. 3. 2. 1.

17 —— 1.
16 —— 000.
15 —— 00000.
14 —— 0000000.
13 —— 000000000.
12 —— 00000000000.
11 —— 0000000000000.
10 —— 000000000000000.
9 —— 00000000000000002.
8 —— 0000000000000000255.
7 —— 000000000000000025563.
6 —— 00000000000000002556382.
5 —— 0000000000000000255638298.
4 —— 000000000000000025563829864.
3 —— 00000000000000002556382986400.
2 —— 0000000000000000255638298640064.
1 —— 000000000000000025563829864006470.
—————— 20000000000000001.
·556382986400646900.
40000000000000000044.
15638298640064685600.
25000000000000001729.
·163829864006468387100.
16000000000000000020384.
··382986400646836671600.
2000000000000000025561.
18298640064683664603900.
18000000000000^002300661.
··29864006468 56230323900.
200000000000000000255638 1.
·986400646836622776751900.
8000000000000000102255696.
18640064683662267449620400.
180000000000000002300753601.
··64006468366226514880679900
600000000000000007669178949
·4006468366226507217500951
40000000000000000511278597.
···6468366226506706222353
6000000000000000000766917
·4683662265067054554358
400000000000000000051 12
·68366226506705450323
600000000000000000007669
·8366226506705442653
8000000000000000001022
:3662265067054416312

Et ecce quoquè demonſtratio in toto numero, aſſumpto à P. Milliet pro exemplo.

17.16.15.14.13.12.11.10.9.8.7.6.5.4.3.2.1.

℞. 1000000 0000000001278191493200323 4.
20000000000000001.
200000000000000022.
2000000000000000247.
2000000000000000 2548.
20000000000000000 25561.
2000000000000000 0255629.
2000000000000000 02556381.
2000000000000000 025563924.
2000000000000000 0255639289.
20000 000000000000 02556392983.
2000000000000000 025563929862.
20000000 000000000 2556392986400 3.
20000 0000000000000 25563929864006 2.
2000000000000000 0255639298640064 3.
2000000000000000 02556392986400646 4.

℞
1.
6000000.
9592009.
640799100.
859728124.
78107097600.
78959201929.
9914789567100.
57194560258 56.
61953333541244.

At-

Atquè lucidiſſimè Theorema demonſtratur cum enim extrahenda ſit radix quadrata à propoſito numero B, radix vnitatis, quæ eſt primus numerus, & cuius regulator eſt numerus 17., eſt pariter vnitas, hæcquæ ab altera ſubducta, per arithmeticam rationem, in reſſiduo cyphram præſtat.

Quià ſucceſſiuè ea radicis vnitas duplicanda, & cum ea numerus aſſumendus, qui totum numerum ad ſecundum punctum, cuius regulator 16. diuidat, vel de proximo minori ſaltèm, clarum eſt ipſum ſimplicem quoque binarium nullum effectum promere valere propter cyphrarum multitudinem vſque ad .1. regulatorem numerũ, atquè conſequentèr quotientem futurum ſemper .o. donec propoſitus numerus B. quantitate numerorum ſignificatiuorum præcellat Diuiſorem, quod ibi ſolùm continget, vbi primus regulator numerus eſt.1.

Hìcque incohando duplicatæ radicis applicationes, primus eiuſdem numerus, nempè.2. vice vnica metitur binarium numerum primum ſignificatiuum in propoſito numero B; ac huiuſmodi hic bifariam diuiſus.

Ipſamque proſequendo applicationem ad connexos numeros 55., quorum regulator.8., ipſi quoquè per binarium duplicatæ radicis in duas partes æquales ſeiungentur,

Sicuti, & cæteri ad finem,

Intactis ſemper remanentibus numeris reliquis, copia namque cyphrarum, quæ eſt in Radice, immutare, ex earum natura, non poteſt numerum ſuperiorem;

Ergò quæ, poſt cyphras, radix emanabit, erit medietas, vt fuit dictum ſuprà, fractionis in numero minori binario, ac vnitate maiori, quod erat demonſtrandum.

Fauetque hoc Theorema logorithmorum inuento, quià cognito logorithmo primi numeri propoſiti, ut modò B., eiuſdem medietas erit logorithmus medietatis ipſius, ſiuè eiuſdem Radicis, quæ probata fuit medietatem futuram illius primi propoſiti numeri.

Inſuper, & quoniàm militat eadem ratio in ipſa inuenta Radice, medietas logorithmi eiuſdem Radicis erit paritèr verus logorithmus medietatis numeri, ab eadem Radice relati, & huiuſmodi ad conſumptionem requiſitorum in Theoremate.

De

PVNCTVM XI.

ASTronomia eſt ſcientia cauſas tradens eorum, quæ nobis in terra verſantibus de Cœlo, & Stellis omnibus apparent.

Aſtrologia eſt doctrina virium, & actionum quibus cœleſtia omnia corpora influunt, & agunt. Ex quibus optimè colligetur vera diſtinctio inter Aſtrologiam, & Aronomiam: illa enim conſiderat effectum Stellarum eo loco, quo ſunt, ijſque quas habent familiaritatibus in reſpectu ad alia puncta cœleſtia, demonſtratq; nobis ſuis ſuppoſitis principijs Aſtronomia, quod tali tempore tale Cęli corpus, talem habebit in Cęlo locum cum ſubſequentibus etiam illius cæteris euenientibus, & neceſſarijs cognitionibus, vt dicetur.

Aſtronomico-aſtrologiam peperit, & conſeruauit obſeruatio, & experientia, & tali robore, vt audeat inficiari nemo, quòd Aſtronomia ſcientia non exiſtat propter ipſius demonſtratam certitudinem, obſeruationes arridentes, & principia, & auxilia à Geometria; & quod Aſtrologia alicuius doctrinæ congruum nomen non poſſit ſortiri, ſi & ipſa ſemetipſam in plurimis euidentem demonſtrat.

Eſtque Aſtronomiæ, & Aſtrologiæ ſubiectum illud nempè, quod ab ijs vniuerſaliter conſideratur, & in quod earum quælibet cadit operatio, Totum cœlum prout in motu, & in influxu; & huiuſmodi non conſiderabitur ab Aſtronomis, & Aſtrologis Cœlum prout à Philoſophis ſpeculatur, qui ipſius entitatem, & ſubſtantiam, & prout valet, aut ſubiacere corruptibilitati, aut incorruptibilitati, & huiuſmodi, meditantur.

Si igitur erit Aſtrologia, hoc eſt Aſtrologicum prometur iudicium ex poſitione, & Stellarum accidentibus, neceſſe erit Aſtronomiam ſupponere, quæ tales docet poſitiones, & accidentia, vndè prius agendum erit de Aſtronomia, vt fundamento alterius, quod illuſtratur hoc exemplo: non enim in ægroto bonum ſtatum, morbi depreſſionem, aut augmentum iudicare poſſumus, niſi ad Aſtronomiam recurrendo, ſtellarum poſſe diligenter inquiramus.

Quamobrem incipiendo ab Aſtronomia, hanc diuido in eam, quæ motum cœlorum vniuerſalem repreſentat, & in alteram quæ particularem, vt ſatis habetur ab experientia edocente Stellas omnes ab Oriente per Meridiem ferri ad Occidentem, & ab hoc per Septentrionem

nem ad Ortum, tempore circiter horarum 24. pro ſignificatione motus vniuerſalis; atq; diuerſis valde temporibus ab Oriente per Septentrionem ad Occaſum, & ab hoc per Meridiem ad Ortum pro motu particulari earumdem Stellarum.

Et quià vniuerſalis Stellarum motus ſæpè, ac ſæpius occurit, ac particularis, ille etenim quotidie obſeruatur tempore circiter horarum 24. vt alter alijs diuerſis temporibus ſupra horas 24. hinc eſt quod ipſum prius ſciuerunt ſapientes, & ego priori loco donaueram.

De Sphæra Nomine.

PVNCTVM XII.

QVadruplicem Sphæræ Nomen affert ſignificationem, nam pro ſphæra intelligi poteſt globus, ſiue corpus ſolidum vnica ſuperficie contentum, in cuius medio punctus eſt, à quo omnes rectæ lineæ ductæ ad circumferentiam inter ſe exiſtunt æquales.

Secundò, ſphæra intelligi poteſt pro orbe concauo; qualis dicitur ſphæra primi mobilis, nona ſphæra, &c. Vbi notandum cuiuſcumque Planetæ orbem integrum, ſyſtema, ſphæram appellari, orbes autem particulares non verè ſphæras, ſed orbes.

Tertiò, pro ſphæra intelligi poteſt inſtrumentum quoddam rotundùm conſtans varijs circulis, quibus cœlorum vniuerſales motus commodiſſimè, & alia plurima demonſtrantur.

Quartò, pro ſphæra intelligi poterit ipſamet doctrina ſphærica ſic denominata à forma ſui obiecti.

Ex quibus conſtat Aſtronomos vti artificiali, aut materiali ſphæra, vel ipſam mundanam ſpæram, quaſi ob oculos ponentes, vt intellectum ducant facilius ad has cognitiones atq; imaginariâ vti ſphæra, vt proprias dirigant ſpeculationes, quibus nihil mendacij opponendum eſt, non enim abſtrahentium in intellectiua, & rationali abſtractione mendacium eſt, vt fatetur Ariſtoteles in ſecundo Phyſicæ textu 18.

De circulis Sphæræ maximis, non maximis, Parallelis, & non Parallelis.

PVNCTVM XIII.

CIrculi ſphæræ illi intelligentur, quorum circumferentiæ ſunt in ipſa ſphæræ ſuperficie.

Ma-

Maximi circuli in ſphæra ſunt, qui tranſeunt per centrum ſphæræ: non maximi, qui per centrum ſphæræ non tranſeunt.

Paralleli circuli ſunt, qui aut inter ſe, aut ab aliquo circulo maximo in ſphæra æqualiter diſtant; non paralleli, qui ad inuicem inclinantur, nec à ſe diſtant æqualiter.

Poli circuli ſunt duo puncta è diametro oppoſita, circa quæ circulus mouetur.

Diameter circuli eſt recta linea per centrum ducta, & ex vtrâq; parte in circuli perpheriam terminata, & circulum ſecat duplici æquali diuiſione; diſtinguiturq; in hoc ſolum ab axe circuli, quia omnis axis circuli eſt ipſius diameter, & circuli diameter non eſt ipſius axis, quia ſupra axim mouetur ſphæra, non ſupra diametrum.

Poli cuiuſuis circuli in ſphęra ſunt puncta etiam in ſphęræ ſuperficie, à quibus omnes rectę lineę ad circumferentiam ſui circuli ductę inter ſe habent æqualitatem, quod verum eſt etiam de arcubus in ſphæræ ſuperficie perpendiculariter ductis à polo ad circumferentiam, ſunt enim & hi inter ſe æquales.

Circulorum non maximorum à centro ſphæræ diſtantia ſpectari debet in perpendiculari, & recta linea ducta à centro ſphæræ ad planum circuli, vt in ſphæricis Theodoſij.

Circuli maximi in ſphæra cœleſti ſunt Horizon, Meridianus, Æquinoctialis, aut Æquator, Zodiacus, Colurus ſolſtitiorum, Colurus æquinoctiorum, & hi, vt principaliores, & nunquam immutabiles collocantur in ſphæra cœleſti, quod non eſt de alijs variantibus maximis circulis, vt ſunt Circuli verticales, ſeu Altitudinis, Circuli declinationis, Circuli latitudinis, Circuli horarij, Domorum cœleſtium, & Circuli Poſitionis, cum plurimis alijs, vt Circulis parallelis Meridianorum, Verticalium, &c. qui hic conſiderandi non erunt.

Circuli in ſphæra cœleſti non maximi, vel minores maximis ſunt, Tropicus Cancri, Tropicus Capricorni, Circulus Arcticus, Circulus Antarcticus, Circuli Climatum: Circuli ſemper apparentium, Circuli ſemper latentium, atq; hi circuli ſunt paralleli æquatori, quando ab ipſo diſtinguuntur, nam & ipſe æquator eſt vnus circulorum ſemper Apparentium ſimul, ac ſemper latentium.

PVNCTVM XIV.

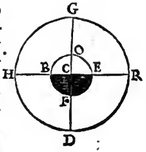
HOrizon, & finitor noſtri viſus diſtinguitur in rationalem, & ſenſibilem.

Horizon rationalis eſt maior circulus à vertice loci, cuius eſt Horizon ex omni ſui parte æquè diſtans.

Vnde diuiditur ſphæra in Hemiſphærium ſuperius,& inferius reſpectu habitantis in ſphæra.

Poli horizontis ſunt vertex, huiuſque oppoſitum habitatoris,& illud dicitur Zenith, & aliud Nadir.

Pro cuius intelligentia intelligetur in hac figura eſſe C Mundi,& Terræ cẽtrum, & BOEF corpus Terræ, Cœlumque, aut Meridianus cęleſtis HGRD, atque ſi eſt in ſuperficie Terræ habitator O, erit illius vertex,aut Zenith G, & Nadir D; vnde ſi ex punctis G, & D, intelligantur deſcriptus maximus circulus,vt HCR, ipſe erit Horizon rationalis cuius poli erunt G & D.



Zenith ab Arabibus nomen habet, at à Latinis vocatur ſummum, & medium Cœli, ſicuti Nadir Imum Cœli.

Si per G & D, ducatur recta G D, per C, ipſa dicetur linea verticalis, & Diameter Horizontis.

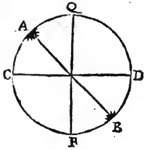
Horizon triplex eſt, ſcilicet rectus, obliquus, & parallelus: Horizon rectus eſt qui tranſit per polos Mundi,& Æquatoris,vt eſt HCR, ſi fiant poli mundi H, & R.

Hic Horizon facit angulos rectos cum Æquatore, ideoque habitantes in ipſo dicuntur habere Sphæram rectam.

Horizon obliquus eſſe dicitur, quando alter polorum Mundi eleuatus eſt ſupra Horizontẽ(nec hic tranſit per mundi polos)vnde fit Habi-

ta-

tatori conſpicuus. A B, ſunt poli Mundi, A B, diameter eſt axis Mundi, A C, poli eleuati ſupra Horizontem quantitas, & menſura.



Horizon parallelus eſt quando aliquis polorum mundi verè inuenitur ſuprà verticem habitatoris, vt ſi vertex accidat in Q, & in Q, ſit aliquis ex dictis polis, vnde fieret recta Q F, axis Mundi.

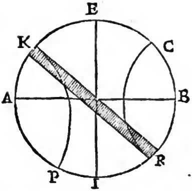
Suprà polos Mundi tota voluitur machina Cœlorum, vnde immobiles eo in loco continuò apparent.

Sphæra æqualiter ab Horizonte rationali diuiditur, fitque, quod ſi alter polorum detur conſpiciendus, alter in altra cœli parte remaneat occultus. Plura ex Almageſto nouo.

Horizontis rationalis plurima ſunt munera, & proprietates, nam facit angulos rectos cum Meridiano, diuidit ſuperius Hemiſpherium, ab Inferiori. Eſtque Hemiſpherium ſuperius illud ſpatium omne, quod eſt terminatum à vertice, & horizonte habitantis, vt in huius prima figura HGR, reliquumque ſpatium dicitur Hemiſpherium inferius vt H D R, diciturque hemiſpherium ſuperius, quià ſuprà nos eſt, vt inferius infrà nos, & huiuſmodi; Tertiò Horizon facit ſphęram rectam aut obliquam, eiuſque minorem, & maiorem obliquitatem determinat; eſt enim ſphæra magis obliqua, in qua alter polorum magis ſuprà horizontem extollitur, vndè eſt terminus à quo ſumuntur altitudines poli, & ſyderum; Quartò determinat verum ortum, & occaſum Stellarum, quæ tunc oriri dicuntur, quando aſcendunt ſuprà Horizontem, & occidere, quando infrà illum deſcendunt; vnde cognoſcuntur ſydera perpetuæ apparionis, Stellæ quæ nunquam oriuntur, & quæ occidunt, & oriuntur.

Ac appellantur ea ſydera perpetuæ apparitionis, quæ numquam per eorum gyrum deſcendunt infrà horizontem; Eaque dicuntur perpetuę occultationis, quæ numquam exeunt ab Horizonte, vt & alibi.

Quintò in horizonte notantur præter quatuor puncta cardinalia, quę ſunt Septentrio, Meridies, Ortus, & æquinoctialis Occaſus, quatuor alia puncta, nempè ortus, & occaſus ſolſtitialis in vtroque ſolſtitio, vt hic ſunt R P, & C K, ſi fiat AEBI, Horizon, A B, Meridianus, & KR, ecliptica. Septentrionis, & Meridiei punctum illud eſt in quo Meridianus horizontem interſecat vt B, & A.



Puncta ortus, & occaſus æquinoctialis ea ſunt in quibus Æquinoctialis circulus horizontem interſecat vt I, & E; ſuntque puncta ortuum, & occaſuum ſolſtitialium illa in quibus Tropici interſecant horizontem.

Sextò, Horizon determinat ſtellarum moram ſuprà, & infrà ipſum, quæ mora ſi eſt Solis & ſuprà, appellatur dies artificialis: ſi infrà nox artificialis.

Septimò, in horizonte menſuratur amplitudo ortiua atque occidua Stellarum, quæ ſemper tanta eſt, quantus eſt arcus horizontis interceptus à punctis ipſius, in quibus ſtellæ oriri poſſunt, aut occidere iuxtà diuerſam earum declinationem, ac latitudinem; eius verò dimidium eſt arcus horizontis inter expoſita puncta, & puncta in quibus Æquator ipſum interſecat.

Octauò, oſtendit cum quo eclipticæ gradu oriatur, aut occidat ſydus quodlibet, & quotus gradus Æquatoris aſcendat, vel deſcendat cum dato puncto cœleſti; & quidem rectè in ſphærâ recta, & obliquè in obliqua, ſi iuxtà poli altitudinem congruentem collocetur punctum illud cœli in horizonte, & ſic determinat Aſcenſiones, & deſcenſiones rectas, aut obliquas.

Ille gradus eclipticæ qui tempore eodem cum ſtellâ emergit ab horizonte, aut qui cum ipsâ demergitur dicitur oriri, aut occidere cum illa, & ſic dicitur, quod Canis maior oritur cum gr. 9. Leonis, & huiuſmodi in noſtri poli eleuatione.

Suntq; dictæ Aſcenſiones rectè arcus æquatoris numeratus ab initio æquinoctij Verni, & in conſequentia vſque ad punctum æquatoris in quod cadit circulus declinationis à polis mundi ductus per verum locum ſyderis, & ſunt deſcenſiones ſimilis arcus æquatoris oppoſitus Aſcenſioni. No-

Nonò, eſt circulus in quo deſignantur regiones,vnde accipitur denominatio ventorum.

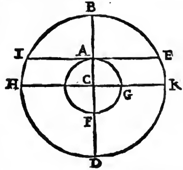
Decimò, eſt circulus reſpectu cuius accipiuntur Almuncatarath, nempè circuli paralleli horizontis tranſeuntes per ſtellas iuxtà earum altitudinem diuerſam.

Vndecimò, eſt circulus in quo ſumuntur Azimutha, quæ nihil aliud importāt quam arcum horizontis intercepti inter meridianum, & alium verticalem in quo ſtella intelligatur.

Vltimò eſt planum illud, in ordine ad quod horizon,vt infrà, ſenſibilis determinatur, vt parallelus Horizonti rationali, dum ad libellam pauimenta, & huiuſmodi reducuntur.

Horum plurima exactius, Deo ſummo permittente, per ſequentia patebunt.

Horizon ſenſibilis, vel naturalis, quià non tranſit per centrum ſphæræ eſt circulus ſphæræ non maximus, parallelus tamen horizonti rationali diuidens ſegmentum viſibile ſphæræ ab inuiſibili.



In hac figura eſt C, centrum mundi, & Terræ FAG : cœlum BHKD. fingitur habitator in A, cuius Zenith erit B, & Nadir D, linea verticalis BAD, horizon rationalis HCK, & ducta recta IA E, paralella ipſi HCK, & linea tangens terram in A, connotabitur horizon ſenſibilis habitatoris in A.

In proprietatibus habet eaſdem ferè quas horizon rationalis, ſeparatque ſegmentum ſphæræ viſibile, & minus à maiori, & inuiſibili; ſecundò determinat portionem ſuperioris hemiſpherij Cœli inuiſibilem cuius quantitas eſt arcus EK, vel HI, quam CA, ſemidiameter terræ ſubtendit, itaut habitans in A, videat IBE, tantùm; tertiò terminus eſt refractionum, & parallaxium horizontalium &c. cōuenit enim cum proprietatibus rationalis horizontis.

Et quilibet habitator ſuum horizontem habet diſtinctum ab horizonte alterius habitantis in Terræ ſuperficie.

PVNCTVM XV.

MEridianus eſt ſphærę circulus maximus tranſiens per polos mundi, Zenith, & Nadir alicuius loci, cuius poli ſunt in punctis horizontis, ortus, & occaſus æquinoctialis, vt eſt circulus H B D K, ſi fiat horizon H C K.

Dicitur Meridianus, quoniam cùm Solis centrum aſſequitur ipſum per motum primi mobilis, fit media dies, aut meridies degentibus omnibus ſub tali meridiano.

Propritates, & officia Meridiani ſunt hæc. Quia ad angulos rectos biſecat horizontem progignuntur duo Emiſpheria, quæ ambo rurſus à verticali perpendiculari bifariam diuiduntur, vnde tota ſphæra ſimul cum horizonte in quatuor æquales diuiſiones ſeiungitur, quarũ duæ, quæ circà Orientem ſunt, altera quidem in ſuperiori hemiſpherio, & altera in inferiori appellantur duæ quartæ aſcendentes, vnde fit tota cœli pars aſcendens, quià cœlum per motum primi mobilis à Meridiano ſub terra per Oriens punctum vſque ad meridianum ſupra terram ſemper eſt in aſcenſu; pariter illæ duæ, quæ ſunt circa Occidens dicuntur deſcendentes quoniam cœlum à Meridiano ſuprà terram Occidens vſque ad Meridianum ſub terra continuo eſt in deſcenſu. Hinc fit quod ſtellæ, prout in ijs quartis verſantur, dicantur eſſe in parte aſcendente, vel deſcendente.

Secundò, æquatorem, & horizontem ſecat orthogonaliter, & bifariam.

Tertiò diuidit ſphæram in Hemiſphærium orientale, & in occidentale, & quidem orientale id eſt, quod nuncupatur pars aſcendens, Occidentale, quod deſcendens, vt ſuprà.

Quartò diuidit bifariam arcum diurnum in duos ſemidiurnos, & nocturnum in duos ſeminocturnos; vnde pendet quantitas temporis antemeridiani, & pomeridiani ab ortu, & occaſu computata.

Quintò ſecãdo bifariam æquatorem diuidit diem naturalem in duas partes æquales, nempè in horas 12. ante, & poſt meridiem.

Sextò metitur maximam altitudinem ſtellæ cuiuslibet, quæ tanta eſt, quantus eſt maximus arcus Meridiani inter horizontem, & centrum ſtellæ; non poteſt tamen eſſe maior gr. 90.

Septimò Meridiem facit, quando Solis centrum habet meridianam altitudinem.

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Octauò menſurat altitudinem poli ab horizonte eleuati, & tanta eſt altitudo poli, quantus eſt arcus meridiani inter horizontem, & polum Mundi viſibilem.

Nonò eſt terminus à quo Aſtronomi ſumunt diei naturalis momenta, quia æquiualet horizonti ſphæræ rectæ, ideoq; rectas determinat aſcenſiones etiam pro habitantibus in obliqua ſphæra; nam idem punctum æquatoris, quod cum aliquo puncto eclipticæ ſimul oritur, vel occidit in ſphæra recta, meridianum tranſit cum eodem in ſphæra obliqua; ideòq; Aſtronomi ad vitandam aſcenſionum obliquarum varietatem, diem naturalem incipiunt à meridie, atque etiam propter alias rationes, vt alibi.

Vltimò determinat initium longitudinis Geographicæ, & ſimul cum cæteris meridianis differentiam lõgitudinis inter duo loca quęlibet, quę ſub eodem non degant meridiano, ipſorum enim æqualis exiſteret longitudo. Et nihil aliud eſt longitudo alicuius loci, quam arcus æquatoris interceptus inter loci meridianum, & primum alterum meridianum Inſularum, quę dicuntur Azores in Oceano Occidentali, & quidem primus meridianus intelligitur eſſe in inſula ſupradictarum, quæ PICO nuncupatur, & tali modo Bononia dicitur eſſe in longitudine ab inſula dicta gr. 34. cum dimidio, quoniam ab ea per gr. 34. cum dimidio diſtat, vt ex obſeruationibus colligitur.

Quamobrem quia ad ſciendam alicuius loci longitudinem, nec in promptu haberi poſſunt obſeruationes, neq; vniuſcuiuſq; labor earum eſt, hinc eſt, quod ad laboris congruum auxilium appoſitus eſt Cathalogus Ciuitatum, & profectò principaliorum, pro differentia meridianorum, atque in eo poſitorum locorum obſeruata, & certior apponitur longitudo.

Vnde ſi in dicto Cathalogo quęratur locus aliquis, in ipſius directum, & ſub titulo longitudinis quæſita patebit loci longitudo: vt ex. gratia. Quæratur longitudo Adrianopolis in Thracia: Ingreſſu facto in dictum Cathalogum ordine alphabetico invenio habere gr 51. m. 45. longitudinis, & ſic de alijs.

Differentia longitudinis eſt arcus æquatoris inter duorum locorum Meridianum interceptus.

Inuenitur per ſubtractionem minoris à maiori longitudine, vt ſi quęratur differentia longitudinis inter Bononiã, & Adrianopolim vt ſuprà, dematur longitudo Bononiæ gr. 34. 30. à longitudine inuenta Adrianopolis gr. 51. 45. eritquè differentia longit. gr. 17. 15. quæſita, & erit

Adria-

Adrianopolis orientalior Bononia quantitate gr. 17. 15. & ratio eſt, quia illi loci ſunt Orientaliores, qui plus diſtant ab Occidente, ſed maiorem habitãtes longitudinem plus diſtant ab Occidente, à quo, vt ſupra, incipiunt numerari longitudines quælibet: igitur erit Adrianopolis Bononiâ Orientalior: & verè tempore vnius horæ, cum m. 9. ſi nunc ſuponatur, vt infrà dicetur dictum æquatorem horis 24. totum ſemetiſpſum reuolui, ſi enim gradibus 360. competunt horæ 24. gradibus 17. 15. competet hora vnica, cum min. 9.

Hæcq; temporis differentia in dicto Cathalogo, ſub titulo differentia temporis, appoſita eſt, dummodo inter ſolam Bononiam, & alterum locum quemlibet hæc differentia quæratur, quod niſi, operandum eſt vt antecedenter dicebatur per longitudinum differentias.

Inſuper in directum differentiæ huius ad ſunt litteræ A ſignificantes additionem, & S ſubtractionem nempe dictam differentiam appoſitam eſſe vel addendam, aut ſubducẽdam à tempore ſub Felſinæ Meridiano, non enim tantus motus Planetæ alicuius in noſtro Meridiano verificabitur in altero, vnde neceſſe eſt has temporum differentias animaduertere in his ephemeridibus, quæ ſupputatæ ſunt ad Meridianum, & Felſinæ longitudinem; vnde ſi figura cœleſtis, vel motus Planetæ ad Meridianum huius Ciuitatis habendus ſit, planetæ ſupputabuntur abſque hac æquatione, quæ adhibenda erit ſi figura eſſet erigenda ad Meridianum alterius Ciuitatis.

Exemplum. Romæ longitudo eſt mihi gr. 36. 19. & ſic Orientalior Bononia gr. 1. 49. hoc eſt m. 7. 16. quare ſi quis vti voluerit his Ephemeridibus pro conſtruenda figura Romæ, ſubtrahere debebit à tempore dato min. 7. 16, vt ſi eſſent in figura v. g. horæ 12. 34'. poſt Meridiem, remanerent horæ 12. 26'. 44''. æquatæ pro differentia Meridianorum.

Hæc regula habet locum in ſupputandis locis, & motibus Planetarum, nam in aſpectibus, & Eclipſibus illorum contrario modo veniet agendum, nam tempus addendum in motibus, eſt ſemper in Eclipſibus ſubtrahendum, & è contrario tempus ſubtrahendum in motibus eſt in Eclipſibus addendum, tardiùs enim contingunt Orientalioribus, quàm Occidentalioribus Eclipſes.

Quo-

Quomodo Circulus Meridianus, & Horizontalis in plano aliquo dato cognoſci poſsit.

PVNCTVM. XVI.

SI datum ſit erigere meridianam, & horizontalem lineam in aliquo plano, eo ſcilicet in quo ſi ſtylus, & gnomon aliquis extolleretur ipſe ſtylus reſpiceret cœlum, animaduertendum eſt, an illud planum horizontale ſit verè rationali horizonti parallelum, quod per libellam aliquam cognoſci poterit dum perpendiculum ipſius ſecabit præcisè libellam in duas partes æquales, ſignum paralleleitatis talis plani; Hoc idem quoque cognoſci poterit per cylindrum aliquem, aut ex vitro, vel criſtallo ſic aquâ repletum, vt ſolùm guttæ aliquæ aquæ ipſi defficientes totum cylindrum non repleant propter effectus ſequentes.

Si gutta aquę defficiens cylindro appoſito alicui plano præcisè medium cylindri conſequatur, ſignum erit, quod planum eſt verè rationali horizonti parallelum in ea parte, in qua cylindrus collocatus eſt, & ſi non, non verificabitur, & huius ratio eſt, quia, cum aqua, & factus cylindrus ſit corpus graue, eâ in quam planum parte declinabit, cernetur aqua ad centrum proprium aſpirare, & recurrere, & proinde plani inæqualitas patere poteſt, at cum gutta aquę ſiſtit in medio cylindri ſignum eſt, quod planum horizonti rationali parallelum eſt, nam ſi hoc non eſſet aqua propriam naturam, vt dicebatur, demonſtraret in aliquam partem declinando.

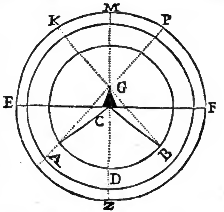
Habito horizontali plano, rationali horizonti parallelo, vt libet, dumodo dictum planum habeat radios Solis antemeridianos, & pomeridianos, in ipſo collocetur perpendiculariter ſtans aliquis ſtylus, aut gnomon, auxilio libellæ, benè in capite acuminatus, nec infigatur niſi priùs facto centro in eo loco, quo vult gnomon collocari interuallo accepto ad libitum rationale, vt dicenda poſſint euenire, deſcribatur circulus, vel meliùs plures diuerſis interuallis ſemper ab eodem centro circuli, vt certior fiat operatio.

Hoc facto per aliquod tempus ante meridiem craſsâ mineruâ cognitum, & poſt horas multas ab Ortu Solis die ſereniſſimâ obſeruandum eſt momentum, quo apex vmbræ ſtyli antemeridianę aſſequitur circumferentiam vnius ex circulis deſcriptis, & ſic paruum fiet ſignum quò dicta vmbra peruenit; Deinde poſt meridiem obſeruabitur, quò vmbra pomeridiana creſcendo aſſequitur eiuſdem circuli peripheriam, in qua

F ante

ante meridiem adnotatum fuit punctum, & ſic alterum punctum in eodem circulo cognitum erit.

Quare ſi diuidatur bifariam arcus à duobus punctis adnotatis, & per punctum diuiſionis,& centrum ſty[illegible] ducatur recta linea,ipſa erit quęſita meridiana, & in plano circuli Meridiani. C G eſt ſtylus, aut gnomon,& Sol in K emittit vmbram G B,& notatur diligenter punctum B pro vmbra antemeridiana ſi E fiat ortus; pariter Sol in P facit vmbram pomeridianam G A, & notatur punctum A; deinde arcus A D B, bifariam in D diuiditur, & ducitur per DC, recta DCM, quæ erit linea quæſita Meridiana, & quia horizon Meridianum ſecat ad angulos rectos, hinc eſt,



quod ſi ex C ducatur orthogonalis diameter E C F, ipſa erit repræſentatiua horizontis: Ratio quod ex his ſequi debeat vera Meridiana eſt, quia vbi Sol, ſeruata ſemper eiuſdem gnomonis magnitudine, & inalterabilitate, emittit vmbras æquales, ibi æquales habet ab horizonte altitudines, & diſtantias à meridiano, vt altitudines KE, & PF, & diſtantias KM, & MP, quare neceſſe eſt punctum M ſit præcisè intermedium inter K,& P, vt KM ſit æqualis arcui M P, ſed factum eſt præcisè intermedium M inter K, & P cum arcus A B æqualis arcui K P bifariam diuiſus fuit in D, vnde nihil dubitandum eſt, quòd optimè geſtis ijs, quæ dicta ſunt recta MCD vera meridiana non ſit; patetque quòd arcus K P ſit æqualis arcui AB quia per 15 primi Euclidis anguli KGP, & A G B ſunt inter ſe æquales; quare, & arcns KP æqualis eſt arcui A B per 26. tertij eiuſdem.

Notandum quòd ſi ante, & poſt meridiem in pluribus circulis plura puncta adnotentur vmbræ apice ad ea omnia perueniente, atque diuiſo arcu ab adnotatis punctis intercepto in duas portiones æquales, & eadem ex omnibus diuiſionibus linea meridiana proueniat maxima habebitur certitudo veræ lineæ inuentæ meridianæ; quod finis eſt multiplicatorum circulorum pro exactiſſimo illius inuento.

Inuentâ meridianâ lineâ, & non vllo modo remoto gnomone innote-

te-

teſcet verum meridiei tempus cum vmbra apicis **gnomonis** aſſequetur lineam protractam meridianam.

Poterunt ſic vnicâ inuentâ lineâ meridiana plures aliæ in cæteris planis efformari, & vbicumque, nam ſi aliæ meridianæ in planis vicinis, & horizontalibus deſignari velint, erectis gnomonibus, & in omnibus, vt ſuprà, ſtatim ac vmbra gnomonis peruenerit ad lineam meridianam primò ex dictis inuentam, adnotari fiat punctum in apicibus vmbrarum, quas gnomones alij proijciunt in plano horizontali, nam linea per punctum illud, & per centrum proprij ſtyli ducta, erit quæſita linea Meridiana.

In parietibus verticalibus, aut horizonti perpendicularibus affigatur quomodolibet ſtylus aliquis ſubiectus Soli, tempore meridiano, atque ſemper conſiderata prima linea meridiana, cum hæc demonſtrauerit meridiei tempus ex aduentu vmbræ ſuprà meridianam, adnotetur diligenter punctum termini vmbræ gnomonis collocati in plano verticali, nàm per illud punctum ducendo rectam lineam ipſa in tali plano meridiana erit.

Sed ſi velit gigni meridiana linea alicui ſuperficiei non perpendiculari ſed pendulæ, & obliquæ, vt ſunt tecta domorum non aſpicientia rectè meridiem, nec vllam aliarum partium mundi, filum aliquod perpendiculariter extendatur ſuper extremum vmbræ ſtyli, habente Sole meridiem, & ſuper vmbram fili in ea ſuperficie factam fiant duo, vel plura puncta, & per ipſa denique ducatur recta linea, quæ erit meridiana.

Plures alij extant modi inueniendi, & procreandi meridianas lineas; at quia ab admodùm Reuerendo, & docto P. Ricciolo in fine **Almageſti** noui pag. 599. & ſeq. optima enucleantur doctrinâ, & ferè omnes ea cupiunt, quæ nondum dicta ſunt, hinc eſt, quòd alios licuit reticuiſſe.

At ſi quæratur modus aliquis, quo poſſet gigni meridiana linea ſub aliquo tecto in planitie horizonti rationali parallelâ, quæ ſi non talis eſſet, fieri deberet, ſciendum eſt quod non perdifficulter per ſequentia conſtrui poterit, concurrentibus loco radijs ſolaribus expoſito tempore aliquo antemeridiano, & aliquo pomeridiano, foramine expolito, aut in muro perpendiculari horizonti, vel in tecto horizonti oppoſito, atq; ſi foramen erit in pariete, vt perpendiculari horizonti, optima dabitur opera an ille verè horizonti ſit perpendicularis, & ſi ſit in tecto, auxilio perpendiculi infixi centro foraminis adnotabitur diligentiſſimè pun-

 ctum

ctum in horizonte verè oppoſitum centro foraminis, vt fiet etiam cum foramen erit in pariete verè horizonti vero perpendiculari.

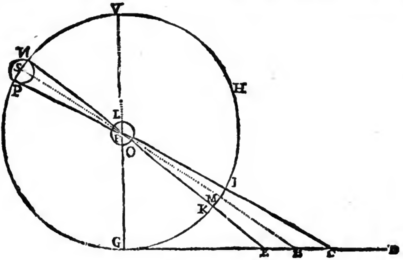
Hoc puncto ſubtiliſſimè habito ſereniſſimâ die, cum radij ſolis erunt in foramine, diligentiâ poſſibili adnotetur motus obiecti ſolaris à foramine habiti in horizonte, ſemper centro telluris parallelo vſque quo tempus meridiei interuallo aliquo tranſactum eſſe conſiderabitur, ſic enim à puncto prius adnotato, & centro foraminis oppoſito lineę rectiſſimæ productæ vſque ad figuram deſcriptam à motu Solis in horizonte, minima omnium linea erit quæſita meridiana, quæ poterit elongari vt obſeruabuntur radij Solis elongari.

Pro facilitate operum, & laborum remiſſione melius erit expectare diem, qua maiorem Sol habet altitudinem ab horizonte, tunc enim eſt Solis vmbra breuior, & paruæ refractiones radiorumque Solis interruptiones parum meridianæ deſignandæ nocere poſſunt.

Ad comprobationem euidentiorem plurimis diebus operabitur, vt dictum eſt, ac ſi ſemper minima linea in eadem parte accidet, ſemper erit comprobata, & aſſerta ea linea meridiana, quia ſol cum altior eſt ab horizonte, vt in pũcto meridiei, ſemper & minores vmbras deſcribit.

Neque hic alias methodos apponere licet, quia fundamenta earum non etiam anteceſſerunt.

Et ſi comprobatum erit erectam lineam, aut gnomonem veram me-



ridianam

ridianam eſſe, ea poterit diuidi diligenter in tot partes,quot libuerit ſuppoſito perpendiculo 100000. vel plus, aut minus, quare ſi perpendiculum menſuratum erit pedes 10. quibuslibet 10. pedibus extenſæ meridianæ cõpetent 100000.aut radius aſſumptus pedibus 20,200000. meridianę &c. euadetque meridiana linea recta tangens, menſurans angulum diſtantiæ meridianæ à vertice Solis, vt in hac figura, in qua poterit intelligi pro meridiano circulus SGH: V eſt vertex loci, vbi meridiana eſt, vel Zenith, vt ſupra dictum fuit, & F G perpendicularis toti GED conſtructæ meridianæ, S intelligetur centrum Solis, vnde tempore meridiei limbus NFE, cadet in E, & angulus EFG menſurabit arcum GK, & vice verſa etiam limbus P FC cadet in C, & angulus CFG menſurat arcum I G, vt M B ex centro Solis arcum MG determinat per angulum BFG, quare notâ tangente GE, & GC etiam noſcetur arcus G K, & GI, & differentia KI ex ſubtractione G K à G I, quæ connotabit magnitudinem, & diametrum Solis apparentem PN: quia .n. anguli P F N, & IFK ſunt inter ſe æquales per Euclidis 15. in primo, & per 26. in tertio eiuſdem, erunt æquales arcus P N, & KI; addatur K M dimidia differentia inter K, & I, erit notus arcus G M, ſed arcus G M æqualis eſt, per 26. tertij Euclidis arcui S V,quia per 15. primi eiuſdem anguli S F V, & G F M ſunt æquales, ergo notus eſt arcus S V, nempè quantum diſtet centrum Solis S ab V vertice.

Suppono, quæ demonſtrata ſunt à P. Ricciolo in Almageſto nouo, ſcilicet radios Solis ab eodem ipſius puncto propagatos ad terram, ad ſenſum eſſe parallelos, quare

Debet mẽſurari in par. GF 100000. aſſumptis diameter foraminis, vt OL, & ſemper illius dimidium ſubtrahi debebit à tangente maiori nota, & addi minori, vt tangentes correctæ habeantur.

Pro exemplo apponetur maximum, & nobiliſſimum Heliometrum, & linea meridiana erecta in templo S. Petronij Felſinei à clariſſimo Mathematico, Aſtronomo, ac emerito Viro D. Io: Dominico Caſſino,iam, Pręceptore meo humaniſſimo, dum Bononię noſtro in Archigymnaſio publico eloquio vaſtiſſimas Cœlorum ſcientias nitidiſsimè edocebat, vndè iure merito nunc etiam à potentiſsimo Galliarum Sole, cuius glorioſiſsima Maieſtas, lilijs immortalibus Chriſtianiſsimum ſemper afflauit ſuauitatis odorem, illuſtratur. In qua FG intelligetur eſſe par. 100000, & eſt perpendiculum, eſtque diuiſa meridiana G E D prout à GF menſuratur, quotieſque GF menſurat GED toties ſunt 100000. particulę in meridiana G E D: in hac quotidie, permittente tamen die-

rum

rum habitudine, per ingreſſum obiecti Solis ſub figura ellipſis auxilio diuiſę meridianę, vt dicebam, eliciuntur tangentes menſurantes diſtantiam limborum Solis à vertice, & proindè etiam ipſius centri Solaris, vt verbi gratia die 15. Martij Anno 1670. notaueram ipſe tangentem G E, & inueni partium 103950. & notauerat G C Excell. Doct. Petrus Mengolus noſtrorum temporum Mathematicus eximius, & inuenit partium 106000. vndè quia diameter foraminis LO eſt partium 100, erit L F, & O F par. 50. earumdem 100. quæ factæ fuerunt in CG 100000; quare debebunt addi tangenti G E par. 50. & par. 50. ſubtrahi à G C eruntque correctę tangentes GE 104000. & G C 105950. quarè arcus GK menſuratus à tangenti GE erit gr. 46. 7'. 25''. & arcus GI menſuratus à tangenti GC gr. 46. 39. 15. vnde & arcus KI erit gr. o. 31'. 50''. & KM, vel MI m. 15. 55''. ſed fuit GK gr. 46. 7'. 25''. erit ergò arcus GM gr. 46. 23''. 20''. quarè & arcus SV erir gr. 46. 23''. 20''. vt conſtat ex dictis, & tanta erit diſtantia centri Solaris ab V vertice pro tunc.

De Æquinoctiali Circulo.

PVNCTVM XVII.

ISte circulus nuncupatur æquinoctialis, quia cum Sol ad illum motu proprio peruenit æqualem facit vbique terrarum diem nocti nempè diurnam quantitatem, & nocturnam horarum 12.

Eſtque circulus maximus in ſphæra æqualiter diſtans ab vtroque polo mundi, qui ſunt illius poli.

Horum polorum alter dicitur Septentrionalis à ſeptem lucidioribus ſtellis Vrſę maioris, quæ Triones appellantur; Borealis à vento borea inde flante, & arcticus ab Vrſę ſtellis propè ipſum collocatis, ;dum arctos græcè Vrſam ſignificat.

Polus alter nuncupatur meridionalis, quia inde vmbra meridiana in oppoſitam partem proijcitur, Auſtralis à vento Auſtro inde pręflante, atque Antarcticus hoc eſt oppoſitus polo Arctico.

Vnicus polus tantum in aliqua ſuperficie terræ poteſt reſpici, quia dum horum alter eſt in hemiſphęrio ſuperiori, alterum neceſſe eſt ineſſe inferiori ignoto.

Æquatoris, ſiue æquinoctialis huiuſce circuli proprietates ſunt, quod Æquator eſt menſura longitudinum, quæ tanta eſt, quantus eſt arcus

ęqui-

æquinoctialis interceptus inter primum meridianorum, & alterius loci meridianum, vt ſupra.

Secundò quemlibet meridianum diuidit ad angulos rectos, necnon Horizontem in ſphæra recta.

Tertiò eſt menſura motus diurni, aut primi mobilis ſtellis omnibus communis, quia vnanimi obſeruatum eſt ſæculorum conſenſu quæuis ſydera ſpatio horarum 24. circumuolui ab Oriente Occidentem verſus, donec reuertantur ad Orientem, & quoad hunc motum ęqualibus temporibus æqualia ſpatia, ſeu æquales arcus conficere, ſiue in maximo circulo, quem ideò quoque Æquatorem vocauerunt, ſiue in parallelo circulo ipſi Æquatori, atque adeò tranſire qualibet hora per meridianum, aut ſuprà Horizontem aſcendere grad. 15. æquatoris, aut parallelorum ipſius, & 4. minutis horæ tranſire, vel aſcendere vnum gradum, atque vnico horario minuto quindecim minuta Æquatoris, aut paralleli.

Quartò efficit artificialem diem nocti æqualem illis continuò, qui habitant ſub Æquatore, nam hoc non contingit alijs,qui extra ipſum ſunt, niſi bis in anno, dum Sol ingreditur ſignum Arietis, & Libræ.

Quintò deſignat ſua interſectione communi cum Horizonte duo pũcta cardinalia ortus, & occaſus æquinoctialis.

Sextò, eſt menſura, & ſubiectum Aſcenſionum rectarum, & obliquarum.

Septimò, concurrit cum Eclipticâ ad reliquos dies anni artificialis determinandos, qui tam longi ſunt, quàm multi gradus Æquatoris aſcedunt ſuprà Horizontem eo tempore, quo Sol ab ortu ad occaſum traducitur.

Octauò diuidit Sphæram in duo hemiſpheria, Septentrionale, & Meridionale, & Declinationes Auſtrales à Borealibus diſtinguit, quæ ab ipſo, vt termino accipiuntur, quamquam in Meridiano numerentur, dum tanta eſt declinatio Stellæ, aut puncti cœleſtis ab Æquinoctiali, quantus eſt arcus Meridiani inter centrum Stellæ, & Æquinoctialem.

Æquinoctialis in Horizontis plano ſecat orthogonaliter Meridianam, atque ab vmbra gnomonis ſuo apice deſcribitur tempore æquinoctiorum, nam apex illius vmbrę per rectam eamdem lineam fertur diebus æquinoctialibus.

De

PVNCTVM XVIII.

Zodiacus cum ſit circulus, aut potius faſcia plurimam habens latitudinem, in medio habet lineam circularem, quę ſemper proprio motu à Sole percurritur, vocaturque Ecliptica, quę eſt circulus Sphęræ maximus, cuius poli tantùm diſtant à polis Æquatoris propioribus, quãta eſt maxima Solis declinatio, aut maxima Solis diſtantia ab Æquatore; ſicque dicitur Ecliptica, eo quod cum ſit via perpetua, ſub qua ſol incedit, ſi Luna ſub eandem lineam aliquando reperiatur, dum coniungitur Soli, illius lumen pręſcribit, vnum quid oritur, quod Solis Eclipſis nuncupatur, ac ſi illud eueniat, dum Luna opponitur Soli, incidente Lunâ terrę vmbram, Solis lumen amittit, & fit lunaris Eclipſis.

Dicitur Zodiacus à gręco Zodion, quod eſt animal, quoniam diuiditur in duodecim partes, quę ſigna appellantur, & quibus fere ſingulis alicuius animalis nomen datum eſt ad diſtinctionem; aut placebit Aſtrologis, quod Zodiacus dicatur à Gręco Zoi , quod eſt vita, quaſi inferant ſtellas, quę per ipſum mouentur, vitam his inferioribus lagiri.

Cuaſa aliqua explicandi ſigna Zodiaci ſub nomine animalium fuit, quoniam illa duodena ſegmenta Zodiaci, tunc cum Aſtronomi in Gręcia, & in Ægypto diuiſionem hanc intellexerunt, aut perfecerunt, occupabant eas Cœli plagas, in quibus erant Aſtra illa, ſeu 12. conſtellationes, cum aliqua parte.

Zodiacus duplex eſt, alter nullo modo viſibilis, & ſolùm per intellectum conceptibilis, de quo communiter loquitur Aſtronomic-aſtrologia, cuius partes duodecim inter ſe ęquales ſunt, dum quęlibet triginta gradus ęquales continent.

Alter eſt viſibilis, ſeu Stellis fixis, & 12. conſtellationibus refertus, quę vt ſupra denominationem tribuerunt partibus Zodiaci imaginarij, & iſtius duodecim conſtellationes non occupant ęquales partes: primus dicitur rationalis Zodiacus, & Sphęræ primi mobilis; alter apparens, ſenſibilis, & octauę Sphęræ.

Latitudo Zodiaci determinatur à quantitate receſſus Planetarum ab Ecliptica, non enim Planetis, qui continuò mouentur per Zodiacum huius limites tranſire conceditur ab Aſtronomis.

Planetę, & errantes Stellę ſunt ſeptem vltrà caput, & caudam Draconis,

nis quorum motus eſt ſemper contrà ordinem ſignorum Zodiaci, dum fit ſemper ab Ariete Zodiaci rationalis initium motus cuiuslibet.

Nomina, & , gratia breuitatis, Characteres Planetarum, & Signorum Zodiaci vt ſuprà.

Planetę.				Signa Zodiacī.		
Sol	☼	Characteres	Indifferens	Aries	♈	Characteres
Luna	☽		Indifferens	Taurus	♉	
Saturnus	♄		Maleficus maior	Gemini	♊	
Iuppiter	♃		Beneficus maior	Cancer	♋	
Mars	♂		Minor maleficus	Leo	♌	
Venus	♀		Minor benefica	Virgo	♍	
Mercurius	☿		Indifferens	Libra	♎	
				Scorpius	♏	
Caput Draconis	☊		Bonum	Sagittarius	♐	
Cauda Draconis	☋		Mala	Capricornus	♑	
				Aquarius	♒	
Pars Fortunę	○			Piſces	♓	

& huiuſcemodi appellantur hęc Zodiaci ſigna, quia ſydera repræſentantia hæc ſigna efficiunt formam talium animalium, vel, et melius, quia cauſant effectus ſimiles proprietatibus huiuſmodi animalium, quæ poſtea variè diuiſerunt.

Prima ſignorum diuiſio fuit in ſeptemtrionalia, & meridionalia, iſta dicuntur illa ſigna, quæ à circulo æquinoctiali declinant verſus meridiem, vel verſus polum Antarcticum, & dicuntur obedientia, & ſunt ♎♏♐♑♒♓, ſed illa ſigna, quæ ab æquatore declinant verſus ſeptemtrionem, nempè verſus polum arcticum, ſunt ſeptemtrionalia, & dicuntur imperantia, & ſunt ♈ ♉ ♊ ♋ ♌ ♍.

Secunda in quatuor trigonos, aut triplicitates, (dicunturque trigoni, aut triplicitates, quia ſunt ſigna, quę inter ſe diſtantiam retinent tertia circuli parte, & in ordine reſpectiuo ad peripheriam tripla ſunt) ratione eorum temperamenti, in igneum ſcilicet, & ſunt ♈♌♐, quia ſunt ſigna calida, & ſicca, & colerica; In aereum, & ſunt ♊ ♎ ♒ calida, & humida, & ſanguinea : in aqueum, & ſunt ♋ ♏ ♓ frigida, humida, aquea, & flegmatica : in Terreum, & ſunt ♉ ♍ ♑ frigida, ſicca, melancolica, & terrea.

Tertia in ſigna mobillia, & ſunt ♈ ♋ ♎ ♑, in fixa, & ſunt ♉ ♌ ♏ ♒,

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in Communia, & ſunt ♊ ♍ ♐ ♓.

Quarta in ſigna rectè aſcendentia, & ſunt ♋ ♌ ♍ ♎ ♏ ♐ ſic dicta, quia cum ipſis aſcendit in ſphęra obliqua ſupra horizontem maior pars ęquinoctialis, quàm Zodiaci, et in ſigna obliquè aſcendentia, et ſunt ♑ ♒ ♓ ♈ ♉ ♊ ſic dicta, quia cum ipſis aſcendit minor arcus ęquinoctialis ſuprà horizontem in ſphęra obliqua, quàm Zodiaci, ideoque ſigna, quę rectè aſcendunt, obliquè deſcendunt, et ſigna obliquè aſcendentia directè deſcendunt, quod eſt idem ac dicere ſigna longę Aſcenſionis, et breuis.

Quinta in ſigna pulchritudinis corporeę, et maximè faciei, et ſunt ♊ ♍ ♎, et prima medietas ♐, et mediocris pulchritudinis, et ſunt ♏ ♒ ♓, et deformitatis, quales ſunt ♋ ♉ ♑.

Sexta in ſigna fęcunda, nempè ſigna prolifera, et ſunt ♋ ♏ ♓, et paucorum liberorum, et ſunt ♉ ♎ ♐ ♑ ♒, et ſterilitatis, et ſunt ♈ ♌ ♊ et ♍.

Septima in ſigna humanitatis, rationabilitatis, et bonę vocis, et intellectus, et ſunt ♊ ♍ ♎ ♒, et prima medietas nempè 15. gradus ♐, Mediocris vocis, et ſunt ♈ ♉ ♌ ♑, et vltima medietas ♐, et vocis mutę, vt ſunt ♋ ♏ ♓, quę cum ſint naturę phlegmaticę negant linguę agilitatem.

Octaua in ſigna gracile corpus conſtituentia, vt primę medietates ♈ ♉ ♌, in ſigna quę debilia efformant copora, vt primę medietates ♐ & ♊, & in ea, quæ pinguia dant corpora, & magis robuſta, & ſunt ſecundæ medietates eorumdem Signorum, & in ea quæ faciunt corpus carnoſum, & benè proportionatũ, & ſunt ♍ ♎, & ♒, & tandem in illa ſigna, quæ corpora infirma conſtituunt, & ſunt ♉ ♋ ♏ ♑, & ♒.

Nona in ſigna, quæ faciunt ſubiectum periculis extrinſecis, & maximè lapſui ab equo, & ſunt ♐ quando in ipſo ſęuiunt malefici, & in ſigna quę faciunt natum ſubiectum fluxionibus catharrarorum, tumoribus, atque huiuſmodi, ſuntq; ♒ quando in eo furunt malefici.

Decima in ſigna, quæ prædominantur partibus humani corporis, vt Arietem dixere dominari capiti, faciei, oculis, auribus, & malis, quæ generantur in capite, & furori dominatur, vt etiam

♉ Dicitur dominari collo, ceruici, gulæ, humori melancolico, & malis, vt ſuprà.

♊ Dicitur dominari humeris, brachijs, manibus, ſanguini, & eorum malis.

♋ Dicitur dominari pulmonibus, pectori, coſtis, iecori, pituitæ ſalſæ, & eorum ægritudinibus.

Di-

♌ Dicitur dominari ſtomacho, ventriculo, cordi, dorſo, ilijs, diaphragmati, et eorumdem malis.

♍ Dicitur dominari ventri, inteſtinis, humori melancholico, et eorum malis.

♎ Dicitur dominari lumbis, renibus, vmbilico, veſſicę, lateribus, partibus inferioribus ventris, ſanguini, et eorum malis.

♏ Dicitur dominari membro virili, partibus pudendis, loco quo ſedemus, et illi partibus proximis, phlegmati, eorumq; ægritudinibus.

♐ Dominatur coxis, natibus, ilijs, coleræ, et eorum malis.

♑ Dominatur genibus vndequaque, melancholiæ, eorumq; malis.

♒ Dominatur cruribus, ſanguini, eorumq; affectionibus.

♓ Dominari dicuntur calcaneis, pedibus, phlegmati, et eorum paſſionibus, vnde hæc omnia breuiter.

Namque ♈ capiti, ♉ ceruicibus hæret.
Brachia ſub ♊ cenſentur, pectora ♋.
Te Scapulæ Nemæe vocant, teq; ilia ♍.
♎ Colit clunes, et ♏ inguine regnat.
Et femur Arcitenens, genua et ♑ amauit.
Cruraq; defendit Iuuenis, veſtigia ♓.

Vide Tabellam, quam poſuimus inter Tabulas poſt catalogum Ciuitatum.

Vndecima in ſigna, quæ ſe reſpiciunt aſpectu antiſcio, et primario, et ſunt ea ſigna, quæ æqualiter diſtant à punctis, vbi fiunt ſolſtitia, nempè ♑, et ♋, et ſunt ſequentia, quæ inuicem Antiſcia ſunt.

Antiſcia	♋	♌	♍	♎	♏	♐
	♊	♉	♈	♓	♒	♑

et in ſigna, quæ ſe reſpiciunt antiſcia ſecundaria dicta, vel contrantiſcia partim imperantia, et partim obedientia, et ſunt ea ſigna, quæ ęqualiter diſtant à punctis, vbi fit interſectio Zodiaci, et æquatoris, nempè ♈, et ♎, et ſequentia ſunt inuicem contrantiſcia.

Antiſcia	♊	♉	♈	♓	♒	♑	Contratiſcia
Contratiſcia	♐	♏	♎	♍	♌	♋	Antiſcia.

Vnde nota, quòd Antiſcia imperantia ſunt ſigna longæ aſcenſiionis, vt ♋ ♌, ♍ ♎ ♏ ♐, obedientia ſunt ſigna breuis aſcenſionis, vt ♈ ♉ ♊ ♑ ♒ ♓.

Duodecima in humana, ruminantia, et muta: ſunt veró humana, quibus aliqua humana figura inſcribitur, vt ſunt ♊ ♍, priores partes ♐, et ♒, et aliqui ♎ ♒ addunt, Ruminantia ſunt in quibus figura animalis ruminantis deſcripta eſt vt ♈ ♉ ♌ ♑, et hæc obſeruantur ne ☽ in eis verſetur tempore miſſionis ſanguinis, vel medicinæ præbendæ. Muta ve-

 rò

rò dicuntur ♋ ♏ ♐, quæ vt plurimum ſunt obſeruata obeſſe agilitati linguæ, vt dictum eſt, niſi appoſitum ſit impedimentum.

Tertiadecima in ſigna cardinalia, et mobilia vt ♈ ♋ ♎ ♑, in quibus ☉ ſcandens anni tempora gignit, Ver quando eſt in primo puncto ♈, Æſtatem in primo ♋, Autumnum in primo ♎, Hyemem in primo puncto ♑. In ſigna venenoſa vt ♏. In quibus notandum eſt non ſolum ſigna dominari corporis humani partibus, verùm etiam ſuper particularia mundi climata, et regiones, et Ciuitates ſub quorum aſcendente inceptæ fuerint ędificari, vt in ſequenti.

♈ Enim dominatur Siriæ, Paleſtinæ Galliç, Britanniç minoris ſuperioribus prouincijs, Germaniç, Sueuiç, Sileſiç ſuperiori, Poloniç minori, Neapoli, Capuç, Anconç, Imolç, Ferrariç, Florentiç, Fauentiç, Bergomo, Lindauiç, Traiecto, Brunſuicho, Craccouiç, Maſſiliç, Ceſareç Auguſtç. Addit Alphonſus Zobulus ♈ dominari Daniç, quamquam non defficiant ſcriptores, qui eam ponant ſub ♒, ſupereſt etiam ♈ Baſtarniç, Soriç, Veronç, et Patauio.

♉ Gubernat Parthiam, Mediam, Perſiam, Cyprum, Aſiam minorem, Ruſſiam, Poloniam maiorem, Sueciam, Hyberniam, Lotharingiam, Campaniam, Heluetiam, Rhętiam, Franconiam, Burgum-hiſpanum, Bononiam, Senas, Mantuam, Tarentum, Panormum, Tigurum, Peruſiam, Brixiam, Lacernam, Metimlocum, Erbipolim, Caroloſtadium, Lipſiam, Poynam, Nouogardiam, Planum, Senigalliam, Salernum, Ruſſiam-albam, Inſulas Cycladas, Arcipelagum.

♊ Habet Hircaniam, Armeniam, Martianam, Cyrenaicam, Marmaricam, Sardiniam, Longobardiam, Flandriam, Brabantiam, Vuittemburgum, Ægyptum inferiorem, Cordubam, Viterbum, Ceſenam, Taurinum, Vercellas, Regium, Louanium, Brugas, Londinum, Maguntiam, Kitzingiam, Hasfordiam, Bambergam, Norimbergam, Villacum, Tridentum, quę Vrbes à modernioribus ſub ♊ collocantur, etſi Norimberga à Cardano, et Schonero ponatur ſub ♐.

♋ Poſſidet Numidiam, Africam, Bithiniam, Phrigiam, Colchin, Carthaginem, Granatam, Burgundiam, Hollandiam, Zelandiam, Scotiam, Boruſſiam, Byzantium, Tunetum, Venetias, Genuam, Luccam, Piſas, Mediolanum, Vincentiam, Bremam, Treuirim, Eboracum, Sãctum Andream, Lubecum, Magdeburgum, Gorlizium.

♌ Habet Chaldeam, Phęniciam, Orchinam, Galliam togatam, Alpes, Italiam, Siciliam, Apuliam, Bohemiam, Damaſcũ, Syracuſas, Romam, Rauennam, Gemonam, Vlmam, Confluentiam, Pragam, Lintzium,

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Cremiſium, Mantuam, Cremonam, Æmiliam, Sabinam, quamquàm Bohemia apud, Larzeum ſub ♋ collocetur.

♍ Meſopotamiam, Babyloniam, Aſſyriam, Achaiam, Grȩciam, Croatiam, Carinthiam, Atheſinam, Cretam, Athenienſem Ducatum, Galliȩ comatȩ partem, Sileſiam inferiorem, Hyeroſolimam, Corinthum, Rhodum, Nouariam, Aretium, Cumas, Brunduſium, Papiam, Seginam, Lugdunum, Pariſios, Baſileam, Heydelbergam, Erfôrdiam, Vratislauiam.

♎ Bactriam continet, Caſpiam, Thebas, Oaſim, Trogloditicam, Æthiopiam, Tuſciam, Sabaudiam, Delphinatum, Alſatiam, Sundgauiam, Liuoniam, Auſtriam, Vlyſſipponem, Arelatum, Caietam, Laudem, Sueſſam, Placentiam, Veldkirchium, Friburgum, Briſgoiæ, Argentinam, Spiram, Vuimpenonem, Heylprunnam, Friſingam, Viennam, Romam antiquam, Hallam Sueuiȩ, Laucimpinam, Heilbrunam, Moſpauciam, & Antuerpiam.

♏ Matragonctim, Comagȩnam, Cappadociam, Iudȩam, Idumȩam, Gethuliam, Mauritaniam, Noruegiam, Cathaloniam, Sueciam Occidentalem, Bauariam ſuperiorem, Algerium, Valentiam, Trapezuntium, Vrbinum, Aquileiam, Piſtorium, Camerinum, Taruiſium, Patacicum, Forum Iulij, Meſſanam, Viennam Allobr. Monacum, Gedanum.

♐ Arabiam fȩlicem, Tyrrheniam, Celticam, Hiſpaniam, Dalmatiam, Sclauoniam, Vngariam, Morauiam, Illyriam, Toletum, Volterram, Mutinam, Narbonam, Auenionem, Coloniam agrippinam, Sulgnidiam, Rotemburgum, Budam Vngariæ, Caſcouiam, Ludemburgum, Tuberinum, Aſtin, Firmum.

♑ Indiam, Arrianam, Gedroſiam, Macedoniam, Illyrin, Thraciam, Boſſinam, Albaniam, Bulgariam, Græciam, Lituaniam, Saxoniam, Thuringiam, Marchiam Stiriæ, Orcades, Iuliacum, Clectoniam, Bergam, Gandauum, Oxoniam, Brandeburgum, Auguſtam Vindelicorum, Coſtantiam, Dertoſam, Fauentiam, & Tortonam.

♒ Oxianam, Sogdianam, Arabias deſertas, Amazoniam, Sarmatiam, Tartariam maiorem, Vallachiam, Moſcouiam, Daniam, Vueſtfaliam, Pedemontium, partem Bauariæ, Bremam, Amburgum, Montemferratum, Piſaurum, Tridentum, Salisburgum, Ingolſtadium.

♓ Tandem habent Phazaniam, Naſomonitin, Garamantem, Lydiam, Pamphiliam, Ciliciam, Calabriam, Portugallum, Normandiam, Alexandriam, Hiſpalim, Compoſtellam, Parentium, Rhotomagum, Vuormatiam, Ratisbonam.

VI-

Vltima ſignorum diuiſio fuit in ſigna, quæ dixerunt eſſe domus , exaltationes, Triplicitates , & aliquos eorumdem ſignorum gradus dixere, Planetarum terminos , vt V. G. dixerunt , quod domus ♂ eſt ♈, & ☉ exaltatio , & triplicatas ☉ ♃ ♂, & quod primi ſex gradus ♈ ſunt termini ♃, & alteri ſex ♀ , octoq; ſequentes ☿, & ſic vſq; ad finem ♈ , vt in ſequẽti tabella qua domus,exaltationes Planetarum Triplicitates , Termini, & facies ſecundum ſigna Zodiaci extrahuntur.

	V	IV	III	II					I		
Signa Zodiaci.	Domus	Exaltatio	Triplicitas	Termini					Facies		
♈	♂	☉	☉ ♃ ♂	6 ♃	12 ♀	20 ☿	25 ♂	30 ♄	10 ♂	20 ☉	30 ♀
♉	♀	☽	♀ ☽ ♄	8 ♀	14 ☿	22 ♃	27 ♄	30 ♂	10 ☿	20 ☽	30 ♄
♊	☿		♄ ☿ ♃	6 ☿	12 ♃	17 ♀	24 ♂	30 ♄	10 ♃	20 ♂	30 ☉
♋	☽	♃	♂ ♀ ☽	7 ♂	13 ♀	19 ☿	26 ♃	30 ♄	10 ♀	20 ☿	30 ☽
♌	☉		☉ ♃ ♂	6 ♃	11 ♀	18 ♄	24 ☿	30 ♂	10 ♄	20 ♃	30 ♂
♍	☿	☿	♀ ☽ ♄	7 ☿	17 ♀	21 ♃	28 ♂	30 ♄	10 ☉	20 ♀	30 ☿
♎	♀	♄	♄ ☿ ♃	6 ♄	14 ☿	21 ♃	28 ♀	30 ♂	10 ☽	20 ♄	30 ♃
♏	♂		♂ ♀ ☽	7 ♂	11 ♀	19 ☿	24 ♃	30 ♄	10 ♂	20 ☉	30 ♀
♐	♃		☉ ♃ ♂	12 ♃	17 ♀	21 ☿	26 ♄	30 ♂	10 ☿	20 ☽	30 ♄
♑	♄	♂	♀ ☽ ♄	7 ☿	14 ♃	22 ♀	26 ♄	30 ♂	10 ♃	20 ♂	30 ☉
♒	♄		♄ ☿ ♃	7 ☿	13 ♀	20 ♃	25 ♂	30 ♄	10 ♀	20 ☿	30 ☽
♓	♃	♀	♂ ♀ ☽	12 ♀	16 ♃	19 ☿	28 ♂	30 ♄	10 ♄	20 ♃	30 ♂

Vt ex. gratia, ſi velles ſcire quænam ſit domus ♃, in columna vbi inſcribitur domus quære vbi ſit ♃, nam in directum patebit ♐, vel ♓, quæ ſunt domus ♃, vbi nota quemlibet Planetarum duas habere domus præter ☉, & ☽, & ſic in directum poteris habere triplicitatem, terminum, & faciem cuiuſcumq; gradus Zodiaci.

Primò, ob cauſas, diſtinxerunt ſigna in Septentrionalia , aut Imperantia, & Meridionalia, vel Obedientia, quia obſeruauere Planetas in illis ſignis exiſtentes Septemtrionalibus fortiores, & efficatiores eſſe, quã

in

in Meridianis, nempè quando ſunt à parte noſtra, nos enim habitamus Zonam Septemtrionalem, ea enim eſt, quæ verſus polum boreum tendit, & contra ſuccedere illis à parte Meridionali habitantibus, quando Planetæ ſunt in ſignis Meridianis.

Diuiſere ſigna in quatuor trigonos ſecũdum temperiem quatuor elementorum, quia Planetæ in ipſis poſiti fiunt etiam temperati ſecundum eorum naturam, vt ♂ in ♈ fit calidior, & ſiccior, in ♉ minus ſiccior, & calidior, vndè etiam, vel plus, vel minus proprias, quas habet ſublunaribus participat qualitates.

Diuiſere in mobilia, fixa, & communia, quia Planetæ in illis connotant mobilitatem, inſtabilitatem, & in actionibus celeritatem. In fixa, nam perſeuerantiam, & conſtantiam in propoſito. In communia, quia in ipſis fiunt mixti effectus, & duplicem ſignificant, vel irreſolutionem in rebus.

Diuiſere in ſigna rectæ, & obliquæ Aſcenſionis, & decenſionis, quoniam inter aſpectus Planetarum, vt inferius, obſeruarunt quod trinus aſpectus in ſignis breuis Aſcenſionis, aut deſcenſionis, & ſextilis in ſignis longę Aſcenſionis, aut deſcenſionis induat naturam quadrati, vndè benefici aſpectus, malefici per æquatorem fiunt, vt etiam è contrà; nam quadratum in ſignis longæ aſcenſionis, aut deſcenſionis fit Trinum, vt in breuis aſcenſionis fit ſextile, producunque effectus ſimiles quantum ad bonitatem, aut malitiam trino, ſextili, & quadrato in quos aſpectus conuertuntur.

Diuiſere in ſigna maſculina, & fęminina, quia Planetæ in maſculinis magis maſculi, & in fęmininis magis effęminati obſeruantur, ideſt maſculini potentiores, ac fęminini debiliores.

Diuiſere in ſigna pulchritudinis, & mediocris pulchritudinis, & turpitudinis, quoniam quando aſcendens, luminaria, eorumque diſpoſitores, & præcipue horoſcopus, & ☽, interque diſpoſitores illi, qui diſponunt locum ☽, & aſcendens, reperiuntur in ſignis pulchritudinis, pulchros facie componunt, ſi in ſignis mediocris pulchritudinis, mediocres, & ſi in ſignis deformitatis, deformia conſtituunt corpora.

Diuiſere in ſigna fęcunda, nempè multorum liberorum, & ſterilia, paucorum, quia cum ſint Planetæ in ſignis fęcundis dant multos filios, ſi in ſterilibus paucos, aut nullos, vel complexionis maximè debilis, ſi in ſignis paucorum filiorum non multos.

Diuiſere in ſigna humana, rationalia, &c. quia obſeruauerunt Planetas exiſtentes ipſis facere talia, rationales enim producebant effectus.

Di-

Diuiſere in ſigna corpus gracile conſtituentia, quia Planetæ dum ſunt in ipſis ſignis, & dominantur corporeæ conſtitutioni graciles homines dant, & pingues ſi ſint in pinguibus.

Diuiſere in ſigna accidentium, & tumorum, quia probauerunt in ♐ particulariter ſignificari lapſus ab equo, vel aliquo alio animali portãte, hoc tamen quando ſunt in ♐ malefici, & ſignum ♒ producit tumores, fluxiones, apoſtemata, & ſimilia, quando in ipſo precipuè eſt ♂.

Diuiſere in ſigna dominantia varijs partibus corporis, vt ſupra, quia ſuccedunt varij effectus in diuerſis partibus coporis, ſecundum quod diuerſa ſigna à maleficis afficiuntur, aut ſecundum quod ſunt malè, aut benè affecti in dictis ſignis.

Diuiſere in Antiſcia, vel primaria, vel ſecudaria, aut in partes imperantes, & obedientes, quia obſeruauerunt, quod radij proiecti à Planetis in ſigna reſpicientia Antiſcia, tam primaria, quam ſecundaria habent eaſdem vires, ſed minorem illa, quam obtinent in ſignis, vbi ſunt, ideoque minores habent vires Antiſcia ſecundaria, quam primaria.

Et quia obſeruauere ſigna ſeptentrionalia habere quamdam prærogatiuam, & vim ſuprà meridionalia, ideo illas partes imperantes vocauere, & meridionalia partes obedientes.

Diuiſere in humana, ruminantia, & muta, quia inter ſigna Zodiaci talia ſunt ſigna, vnde ſatis patet hæc diuiſio, & ſequentis diſtinctionis methodus allata ſuperiùs.

Diuiſere in ſigna, quæ præſunt Vrbibus, & Prouincijs, quoniam experti ſunt, quod ſi aliquis Cometes, vel Eclipſis ſolaris in huiuſmodi ſignis fuerint, tunc accidit aliquid illi regioni, vnde è conuerſo cum multoties obſeruaſſent vni regioni accidere quamplurima, dum eueniebat in tali ſigno ſolaris Eclipſis, vel aliqua Metheorologica impreſſio, dixerunt quod tale ſignum prædominabatur tali Vrbi.

Denique dixerunt aliqua ſigna eſſe domus ♂, aliqua ♃ vt ♐ & ♓, quia obſeruauerunt Planætas in aliquibus ſigni eſſe fortiores, & efficaciores, ideoque dictas eorum fortitudines appellauere dignitates, & ternario numero compleuerunt, nempè Domus, Exaltatio, & Triplicitas.

Inter has dignitates maior eſt domus, ſequitur exaltatio, & poſtea Trigonum, &c.

Ex omnibus dictis dignitatibus elicitur altera, quæ maior omnium eſt, vocaturq; ſolium, carpentum, & Planetarum Thronum, hoc autem

eſt

eſt in illo ſigno vbi Planeta habet duas ex prædictis dignitates,vel exaltationis, & triplicitatis, vel domus, & exaltationis, vel domus, & triplicitatis.

Eadem ratione,quia experti ſunt Aſtrologi nonnullos ſignorum gradus habere virtutem exempli gratia ♃,intelligetur autem virtus debilis, alios ♀, ideo gradus illos vocauere terminos ♃, & ♀, & ſic de alijs, vt in tabula ſupra, quæ de facie Planetarum erunt etiam dicenda.

E contra vero, quia obſeruauerunt maxime debiles eſſe Planetas quando ſunt in ſigno oppoſito eorum domus, aut exaltationis, hinc eſt quod ſignum domui oppoſitum dixere detrimentum illius Planetæ, & ſignum exaltationi oppoſitum dixere Planetę caſum,taliter enim deprimitur multùm, & ſatis debilitatur ille Planeta, quando in ipſo eſt, etſi minùs detrimento.

Similiter dixere Planetam eſſe peregrinum, ideoque valde debilem, quando eſt in aliquo ſigno, vbi nullam obtineat dignitatem, ex quibus ad euitandam æquiuocationem notandum erit, quod ſigna domus, vel exaltationis dixere familiaria, & eorum oppoſita Planetis non familiaria, quæ exponi ſic poſſunt.

Saturni domus eſt noctis Caper, vrna diei,
Gloria Libra ſeni, ſed dolor eſt Aries.
Iuppiter Arcitenentis habet cum Piſce Sagittam,
Cui tamen in Cancro ſors bona, iniqua Capro.
Mauortis domus eſt Aries, & Scorpio pugnax,
Huncque Caper tollit, Cancer ad ima premit.
Sol habet hoſpitium ſibi ſolus in æde Leonis,
Atque illi eſt Aries gloria, Libra dolor.
At Venus in Tauro, Libræque per atria verſat,
Piſcibus exaltat, Virgine preſſa iacet.
Mercuriuſq; habitat Geminorum in ſede; triumphat
Virgine, & eſt mœſtus Piſcium in arbitrio.
Luna domum Cancri tenet, illam Taurus bonorat,
Et ſuprà banc verſans Scorpio ſorte premit.

Atque ſic ſunt terminatæ dignitates Planetarum ob maiorem facilitatem.

Quinque ſuis domibus claros ſortitur bonores,
Quatuor in Solio quiſque Planeta ſuo,
Finibus inque ſuis binos ſibi iure triumphos,
Tres autem in propria triplicitate capit.

 Vnam

Vnam dumtaxat fuerit ſi forte decano,
Quiſque ſuo. Vates, quod docuere boni.

Pro enulcandis Zodiaci proprietatibus, atque officijs fas eſt dicere, ſtellas quaslibet moueri duplici motu, vno nempè de Oriente per Meridiem in Occidentem, per quem cuncta ſydera quotidie circum terram voluuntur, eſtque motus competens primo mobili, cæteros orbes rapienti, & ab Oriente per Meridiem in Occidentem deferenti. Alter motus eſt ab Occidente per Meridianum ad Orientem inferioribus orbibus competens, eſtque motus ſecundorum mobilium nuncupatus; vndè primum Eclipticæ munus eſt, quod ſit menſura motuum ſecundorum mobilium, & ſtellarum errantium, per ipſum enim cognoſcitur diſtantia ſtellæ à principio Arietis proprij, vndè concluditur Stellas eſſe in tali gradu ſigni ex diſtantia ipſius à dicto Ariete, vt ſi videmus ♃ apparere nobis in diſtantia à puncto æquinoctij Verni, aut dicti Arietis à quo deſumitur initium motus per gr. 26. dicimus ♃ eſſe in gr. 26. ♈, quod ſi intrà 14. dies reperiatur ſub gr. 30. ♈ dicimus ♃ illis 14. diebus proceſſiſſe ſignum Arietis, & incipere ſignum ſequens ♉ &c.

Secundo, ſecat in duas æquales partes Æquatorem in duobus oppoſitis punctis, in quibus æquinoctia fiunt, Vernum quidem ingrediente Sole ſignum ♈, atque Autumnale eo ingrediente ſignum ♎.

Tertio, ratione ſuæ obliquitatis cauſat inæqualitatem dierum artificialium degentibus in obliqua Sphæra.

Quarto, ſecat Æquatorem in ♈, & ♎ obliquè, & angulus, quem Ecliptica facit cum Æquinoctiali ſubtendit arcum Coluri ſolſtitiorum, qui Colurus eſt vnus ex Meridianis mobilibus, & profectò tantum arcum quanta eſt diſtantia Solis ab Æquatore in ſolſtitijs, nempè dum ☉ habet verum ♋, & ♑ principium.

Quinto, Polis ſuis, & eorum motu diurno deſcribit circa Polos Mundi circulos arcticum, & antarcticum, vndè Zonæ frigidæ determinantur.

Sexto, per motus luminarium in Ecliptica numeratos ſicut & aliarum Stellarum habetur cognitio, tum horæ, & loci in quo aliqua euenit Eclipſis, eſtque Eclipſium aliqua cauſa.

Septimo, ſua obliquitate determinat locum Tropicorum, & ab Æquatore diſtantiam, vndè Zona torrida à temperatis ſeiungitur.

Octauo, diuidit Cœlum bifariam, ſcilicet in partem Auſtralem, & in Borealem reſpectu Polorum, quare, & Stellæ, quæ ab Ecliptica declinant, habent declinationis denominationem à Polo verſus quem declinant.

No-

Nono, eſt terminus, vndè menſuratur latitudo Stellarum, eſt enim pro nunc latitudo Stellæ diſtantia ipſius ab Ecliptica.

Decimo, cauſa eſt ſimul cum Æquatore omnium Aſcenſionum.

Vndecimo, diuidit cęleſtem Sphæram in Hemiſphærium Septentrionale, & Meridionale ſpectatâ Stellarum latitudine, ſicut Æquinoctalis ſpectata declinatione.

Loca Planetarum ad quodcumque tempus aſsignatum per Ephemerides ſecundum longitudinem ſupputare.

PVNCTVM XIX.

IN gratiam primæ proprietatis Zodiaci fas fuit adiungere modum, quo poſſit ſciri, auxilio tamen Ephemeridum, quantâ Planetæ diſtantia ab ♈ nobis appareat temporibus Ephemeridum quod longitudinem Planetæ à nobis viſibilem importat.

Pro cuius inuento ſciendum, quòd omnes errantes, aut Planetæ in Ephemeridibus ſupputati ſunt ſingulis diebus, in ipſo verò puncto Meridiei; hique, cum continuo moueantur etiam per horas, & diei minuta permutando loca in Zodiaco, & taliter, vt elapſo aliquo minimo tempore non amplius reperiantur in ipſo veri Meridiei momenti loco, quare hìc accidit exponendum, quomodo Planetarum loca ad quodlibet momentum extrà punctum Meridiei facilè haberi poſſint, cum iam apud Aſtronomos ſupponatur Planetas in horis, & minutis diei motum æqualem perficere.

Sic inueſtigabuntur ad quodcumque tempus Planetarum loca. Obſeruetur differentia inter locum Planetæ die aliquó, & Aſtronomico à Meridie inchoante, vt infrà, & altero immediatè ſequenti, habeturque hæc differentia per ſubtractionem longitudinis minoris à maiori, & vocatur Planetæ motus diurnus.

Deinde ſit cognitum momentum temporis à Meridie, ad quod ſupputati concupiuntur Planetæ.

Quibus habi tis per auream regulam, vt horæ 24. ad motum diurnum Planetæ, ità momentum temporis à Meridie, vt horæ 2, & minuta 15. ad partem proportionalem competentem tempori à Meridie ex inuento motu diurno, quæ quidem addenda erit motui, quem Planeta habet in Meridie die completa ſi directus ſit Planeta, quando ſcilicet progreditur ſecundum ordinem ſignorum, & numerorum, atque eſt ſubtra-

henda quando Retrogradus ſit, nempè quando contrà ordinem ſignorum,& numerorum progreditur: & tunc aliquis Planeta dicitur progredi ſecundum ordinem ſignorum, quando incipiens motum ab ♈ pergit ad ♉, deinde ad ♊ per ♎ procedens vſq; ad ♓, & numerorum quando ab vnitate pergit ad binarium, dein ad Ternarium &c. & contrà ordinem Signorum, & numerorũ progredi dicitur cum dicta eueniunt ex aduerſo.

Et niſi velit vti aureâ regula pro inueniendis hiſce partibus proportionalibus, poterunt reduci horæ,& minuta æquata P. M. in proportionem ſexagenariam per Tabulam ad hunc finem additam, & quæ dicitur Canon conuertendi h. & m. P. M. æquata, in ſcrupula,&c. nam quęſitis his ſcrupulis in Tabula ſexagenaria loco horarum, & min. P. M. patebit in area eiuſdem Tabulæ ſexagenariæ, quæſita proportio quadriuicenaria.

Sint pro exemplo ſupputanda loca Planetarum die 28. Auguſti Anni 1688. horis o. m. 40. elapſis à Meridie dierum 28.

Supputationes Anno 1688. ex meis Ephemeridibus.

♄	G.	M.	♃ ℞ G. M.
Locus ♄ die 28. Auguſti ♎ gr. 28.	min. 53.		♃ ♑ 18. 20.
Locus ♄ die 29. Auguſti ♎ gr. 28.	min. 59.		♃ ♑ 18. 17. ℞
Differentia, & motus diur. ♄ gr. o.	min. 6.		motus ♃ o. 3. diurnus.

Qua de re ſi competunt horis 24. min. 6, per regulam trium competent eorum ſecundæ circiter 10. horis o. 40. datis, vnde eſſet ♄ locus gr. 21. 53 10''. ♎ & ♃ 18. 19. 55. ♑, & ſic operatum fuit in ♄ addendo nempè partem proportionalem quia ♄ eſt directus, ſubtrahendo autem ♃, quia ℞. ſiuè retrogradus, & cuius pars proportionalis eodem modo inuenta fuit ſec. 5.

Sup-

Supputatio	♂		&	☉	
		G. M.			G. M. Sec.
Locus ♂ die 28. Aug.	♍	7.44.	☉	♍	5.52.33.
die 29.	♍	8.23.		♍	6.50.42.
Motus diurnus ♂	gr.	0.39.	Motus	☉	0.58. 9. diurnus
Proportio pro h.0.40.	gr.	0. 1.		gr.	0. 1.38. circiter
Locus quæſitus ♂	gr.	7.45. ♍	☉	gr	5.44 11. ♍
	♀			☿	
		G. M.			G. M.
Locus ♀ die 28. Aug.	♍	4.14.	☿	♍	1.25. ℞
die 29.	♍	5.28.		♍	0.46.
Motus ♀ in die		1.14.	Motus	☿	0.39. diurnus
Proportio	gr.	0. 2.		gr.	0. 2. ♍
Locus verus ♀	gr.	4.16. ♍	☿	gr.	1.23. ♍
	☽			☊	
		G. M.			G. M.
Locus ☽ die 28. Aug.	♎	4.36.	☊	♈	26.58.
die 29.	♎	16.29.		♈	26.55. Subtrahitur pro-
Motus diurnus ☽	gr.	11.53.			0. 3. portio, quia ☊
Proportio	gr.	0.20.			0. 0. 5. eſt Retrogra-
Locus verus ☽	gr.	4.56. ♎	☊	♈	26.57.55. do motu.
					aut 26.58'. ♈.

Latitudinem Planetarum ad quodcumque tempus aſſignatum per Ephemerides ſupputare.

PVNCTVM XX.

PLanetæ quilibet præter Solem duplici motu mouentur, longitudinis, & latudinis in reſpectu Eclipticæ, vt ſuprà, quare opportuit modum latitudinis ſupputandæ per Ephemerides addere.

Notabitur igitur, quod inueſtigare ſtellæ latitudinem nihil aliud importat, quàm inuenire quantam diſtantiam habeant Planetæ ab Ecliptica, in qua quando ſunt, nullam afferunt latitudinem.

Eſtque latitudo duplicis denominationis, nam ſi Stellæ degant verſus polum boreum dicũtur habere latitudinem borealem, aut Septemtrionalem, at ſi degant verſus polum Auſtralem dicuntur habere meridio-

dionalem, aut Auſtralem latitudinem: Excepta Lunâ pro nunc, per Ephemerides noſci poteſt quam Planetæ habeant latitudinem diebus 1. 6. 11. 21. 26, vnde pro diebus intermedijs partis proportionalis neceſſarium erit inuentum, quod fiet ſumendo differẽtiam latitudinum inter dies includentes diem, quà quæritur latitudo, rurſuſq; differentiam, quæ eſt inter dies minores, & tempus propoſitum cum interſtitio dierum ex quo latitudinum differentia prouenit, nam illis inuentis ſi fiet, vt interſtitium dictum dierum ad latitudinum differentiam, ita diſtantia temporis propoſiti ab inſcriptis in Ephemeribibus ad partem proportionalem competentem diſtantiæ temporis propoſiti ab inſcriptis in Ephemeridibus quę addetur, vel ſubducetur, eâ defficiente, cognita erit vera Planetæ latitudo, vt ex.gratia. Quæritur latitudo ♂ die 28. Auguſti h. o. 40. P. M. anno 1688. tempore eodem ſuprà dato.

Latitudo ♂ die 26. Auguſti eſt gr. 1. 7.

Latitudo ♂ die prima Septembris gr. 1. 6.

Differentia, et motus competens ſex diebus interceptis inter diem 26. Auguſti, et primam Septembris gr. o. 1'. igitur ſi ſex diebus competit min. 1. quid competet diebus 2. h. o. 40. qui duo dies ſunt inter dies 26. et 28. Auguſti? ſi velit haberi tota operatio, ducantur in minuta ſex dies, et inuenientur eſſe 8640. paritèrq; alij duo dies in minuta reducantur, et inuenientur cum alijs min. 40. eſſe 2920. quibus inuentis, multiplicando 2920. per 60. ſecundas, quæ ſunt vnicum ſuprà inuentæ differentiæ minutum, erit productum 155200, quo diuiſo per 8640, erunt in quotiente min. o, et ſec. 20. pro parte proportionali competenti diebus 2. h. o. 40. hæc, quia decreſcit latitudo à maiori latitudine gr. 1. 7. ſubtrahatur, et datum ad tempus erit vera latitudo ♂ gr. 1. 6. 40''.

Et vt cognoſcatur an ♂ degat ad Septẽtrionem, vel Auſtrum, adnotandæ ſunt litteræ, quę ſunt in capite Ephemeridum, ipſæ enim docent, an ad Auſtrum, vel Boream inclinet Planeta, nam littera S, connotat talem Planetam habere latitudinem Septẽtrionalem, littera M, Meridionalem, A habere latitudinem Aſcendetem, & D Deſcendentem.

Loco aureæ regulæ poſſunt reduci dies vnà cùm horis, & minutis in proportionem ſexagenariam iuxtà Canonem conuertẽdi horas &c. de quo etiam in antecedenti puncto memorauimus, ſumptâ tabula pro interſtitio competente inuentæ differentiæ, nàm auxilio tabulæ ſexagenariæ, & ſcrupulis inuentis proportionalibus loco dierum, horarum, ac minutorum elicietur quæſita pars proportionalis.

Et

Et Planetæ ſi latitudinis variant denominationem ſignantur ijdem characteribus in columna longitudinis Planetarum, vt accidit die 21. Ianuarij Anno *1689*. ♂ mutare latitudinem de Septemtrionali in Meridionalem, ex hiſque die 28. Auguſti h. o. 40. ♂ habebit latitudinem ſeptemtrionalem deſcendentem, vt ex ſuprapoſitis litteris.

Notandumq; eſt, quod quando alicuius Planetæ latitudo mutat denominationem de Sptemtrionali in Meridionalem, vel è conuerſo, tunc addendi ſunt duo nnmeri ſuperior, & inferior, aggregatumq; erit tamquam differentia, de qua ſumenda erit pars proportionalis, quæ ſumpta, ſi fuerit minor numero ſuperiori erit eiuſdem denominationis cum numero ſuperiori, ſi verò fuerit maior, ſubtrahendus eſt ab ea numerus ſuperior, & reliquum erit latitudo quæſita, ſed denominationis inferioris, vt ex. gratia: Quæratur latitudo ♂ die 18. Maij Anno 1700. Die *16*. reperitur latitudo ♂ gr. o. 2. Septemtrionalis, & die *26*. reperitur latitudo ♂ gr. o. 2. Meridionalis. Aggregatum latitudinum eſt gr. o 10, ex quibus competunt duobus diebus, qui ſunt inter 16. & 18, o. 4'. quæ excedunt gr. o. 2. ideò exceſſus à 2. m. ad gr. o. 4. nempè 2. min. erit quęſita ♂ latitudo meridionalis deſcendens.

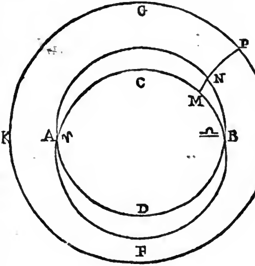
Pro indaganda Lunæ latitudine auxilio Ephemeridum ſubducatur locus capitis Draconis à loco Lunæ, & vocetur productum lunaris latitudinis argumẽtum, cum quo facto ingreſſu in tabulam appoſitam latitudinis Lunæ cum ſignis in fronte, aut in calce, & gradibus in latere, quæſita latitudo patebit, ſequens denominationem titulorum appoſitorum, ac ſi vltrà gradus minutulæ quæpiam portiones adhæſerint, facienda pars proportionalis, velut mathematica exigit diſciplina; vt ex. gratia; Quæratur ad ſuprà datum tempus Lunæ latitudo, dum longitudo Lunæ inuenta eſt eſſe gr. *4*. *56*. Libræ, hoc eſt ſigna *6*. completa, & gr. *4*. *56*'. ſigni ſequentis, inuentaque eſt longitudo Captis Draconis gr. *26*. *58*'. ♈ nempè ſign. o. gr. *26*. *58*'.

Subducantur ſigna o. gr. *26*. 58. à ſignis *6*. gr. 4. *56*. Lunæ, & proſiliet argumentum latitudinis ſign. 5. gr. 7. 58', cum quibus in appoſita tabula habetur, adhibita parte proportionali pro min. 58, quæſita Lunæ latitudo gr. 1. 52. Septemtrionalis deſcendens, vt ex appoſitis titulis.

Pro cuius ampliori intelligentia pro nunc accidet intelligendum, Caput, & Caudam Draconis nihil aliud ſignificare, quam nodos quoſdam, & interſectiones orbis deferentis Lunæ cum Ecliptica, & quod ſectio, quæ prouenit in parte Septemtrionali dicitur nodus Septemtrio-

na-

nalis, ſeu Caput Draconis, & interſectio in Auſtrali nodus Auſtrinus, ſeu Cauda Draconis, pro quo ſit in appoſito ſchemate rationalis Eclipticæ circulus ACBF, & orbita deferens corpus Lunæ A B D, poluſque boreus P, punctum A erit Caput Draconis, & B. Cauda, habebitq; Luna latitudinem, cum fuerit extra A, & B, & hæc tanta erit, quantus erit arcus quadrantis ducti à polis Eclipticę ad Eclipticam interceptus inter Eclipticam, & centrum Lunæ. Igitur cum ☊ ſit in A, et ſit in gr. 26. 58'. ♈, erunt etiam in A hi gradus, & cum Luna ſit in gr. 4. 56'. Librę, erit vt in N, quare ex differentia inter locum ☊, & ☽, notum erit crus BM gr. 22. 2'. reſſiduum ſcilicet ad ☋ ſiuè nodum auſtrinum in diametro ☊ & gr. 26. 58'. ♎; ſed & notus eſt angulus M BN, nam ſupponitur gr. 5. 0, ergo in triangulo MNB, rectangulo ad M, poterit noſci MN, quæſita latitudo, quarè logorithmus anguli M B N 894030. iungatur cum logorithmo diſtantiæ 957420. & fiet logorithmus, cruris M N, 951450, cuius arcus, vt inuentum eſt inuenitur grad. 52'. pro latitudine Lunæ Septemtrionali, quià ſuprà inuentum argumentum latitudinis ☽ non excedit ſigna ſex, & Deſcendenti quià excedit tria ſigna, nàm prima ſex ſigna dicti argumenti Septemtrionalem connotant latitudinem, cætera Meridionalem, aſcenduntque Planetæ cum dictum argumentum habet ſigna 9. 10. 11. 0. 1. 2, deſcenduntq; cùm habent cætera ſigna 3. 4. 5. 6. 7. 8.



Tabula

Septem.	Sign. 0	Sign. 1	Sign. 2	Aſc.
Merid.	6	7	8	Deſc.
Grad.	G M	G M	G M	Grad.
0	0 0	2 30	4 20	30
1	0 5	2 34	4 22	29
2	0 10	2 39	4 25	28
3	0 16	2 43	4 27	27
4	0 21	2 48	4 30	26
5	0 26	2 52	4 32	25
6	0 31	2 56	4 34	24
7	0 37	3 0	4 36	23
8	0 42	3 5	4 38	22
9	0 47	3 9	4 40	21
10	0 52	3 13	4 42	20
11	0 57	3 17	4 44	19
12	1 2	3 21	4 45	18
13	1 7	3 24	4 47	17
14	1 12	3 28	4 48	16
15	1 18	3 32	4 50	15
16	1 23	3 36	4 51	14
17	1 28	3 39	4 52	13
18	1 33	3 43	4 53	12
19	1 38	3 46	4 54	11
20	1 43	3 50	4 55	10
21	1 47	3 53	4 56	9
22	1 52	3 56	4 57	8
23	1 57	3 59	4 58	7
24	2 2	4 3	4 58	6
25	2 7	4 6	4 59	5
26	2 11	4 9	4 59	4
27	2 16	4 12	5 0	3
28	2 20	4 14	5 0	2
29	2 25	4 17	5 0	1
30	2 30	4 20	5 0	0
Septem.	5	4	3	Deſc.
Merid.	11	10	9	Aſc.
	Sign.	Sign.	Sign.	

DE COLVRIS.

PVNCTVM XXI.

Colurus duplex eſt,alter Æquinoctiorum,& alter Solſtitiorum. Colurus Æquinoctiorum eſt maximus circulus, cuius poli ſunt in initio ♋, & ♑ æquatoris, tranſiens per mundi, aut Æquatoris polos, & ſecans ad angulos rectos æquatorem in punctis æquinoctialibus.

Colurus Solſtitiorum eſt maximus circulus, habens proprios polos in principio ♈, & ♎, tranſiens per mundi polos, & ſecans ad angulos rectos Æquatorem, & Eclipticam in punctis Solſtitialibus.

Appellantur Coluri, quaſi mutili, & imperfecti, eo quia eorum partes quædam in ſphæra obliqua numquam ſupra horizontem extolluntur, ſicuti aliæ partes ſemper ſupra ipſum remanent, verumtamen mutili, & imperfecti dicuntur, at per Antonomaſiam Coluri, ſunt enim præter hos alij multi maximi circuli hanc imperfectionem habentes, & quidem tranſeunt per polos mundi, & ſunt mobiles, & neutiquam omnes eorum partes ſupra Horizontem aſcendunt in obliqua ſphæra.

Primum Colurorum munus eſt, quod cum determinent in Zodiaco quatuor puncta cardinalia, nempè ♈♋♎, & ♑ etiam totam faſciam Zodiaci in quatuor æqualia ſegmenta diuidunt, in quorum ſingulis tria ſigna numerantur annorum tempeſtatibus correſpondentia, quare illud tempus, quo ☼ eſt inter æquinoctium ♈, & ſolſtitium ♋, ver nuncupatur: illud tempus, quod eſt inter ſolſtitium ♋, & æquinoctium ♎, dicitur æſtas: quod eſt inter æquinoctium ♎, & ſolſtitium ♑ appellatur autumnus: & quod eſt inter ſolſtitium ♑, & æquinoctium ♈, vocatur hyems, vnde ſi ſciatur tempus, quo Sol ingreditur ♈, noſcetur pariter tempus inchoantis veris, ſi tempus ingreſſus ☼ ad ♋, non latebit tempus incipientis æſtatis, &c. atque cognitis temporibus, quibus ingreſſus ſit ☼, tam ♎, quam ♑ ex differentia inter ea tempora manifeſtabitur temporis autumnale interuallum, &c.

Secundum eſt, quod tam æquatorem, quàm omnes illius parallelos quadrifariam diuidunt.

Primum officium Coluri æquinoctiorum eſt, quod ſcindit Zodiacum in duas partes, vtpotè maximus maximum circulum, at ad obliquos angulos, non enim tranſit per polos eclipticæ, & tanta eſt obliquitas eius ad eclipticam, quantum eſt complementum obliquitatis eclipticæ ad æquatorem.

Se-

Secundum, diuidit ſigna Zodiaci in ſex ſigna borealia, & in ſex meridionalia.

Tertium, omnes circulos æquinoctiali æquidiſtantes ad angulos rectos ſeiungit.

Quartum, deſignat meridianum, in quo fit meridies in momento æquinoctij, nam coincidit cum meridiano illius loci, in quo ſimul hęc duo inſtantia, aut momenta concurrunt, ſcilicet veri æquinoctij, & meridiei.

Primum officium Coluri ſolſtitiorum, pręter allata ſuperius, eſt, quod diuidit Zodiacum in partem aſcendentem, & in deſcendentem. Pars aſcendens eſt ea cæli pars, qua ſtellæ polo loci fiunt proximiores, ex maxima ipſius ab illo diſtantia; parſq; deſcendens eſt illa cœli pars, qua ſtellæ polo loci fiunt remotiores ex maxima ipſius ab illo approximatione. Nobis numerantibus arctici poli altitudinem pars aſcendens eſt ea cœli pars, quæ incipit à ♑, ſequitur per ♒ ♓ ♈ ♉ ♊ vſq; ad initium ♋, vnde fit, quod reliqua ſigna nobis ſint deſcendentia, vtpotè ♋ ♌ ♍ ♎ ♏ ♐ vſque ad finem.

Secundum eſt, quod diuidit circulum æquinoctialem, & omnes ipſius parallelos ad angulos rectos.

Tertium deſignat meridianum loci, in cuius meridie fiunt ſolſtitia, nam cum eo meridiano coincidit Colurus ſolſtitiorum.

Quartum ſuſtinet maximam diſtantiam Tropicorum ab æquatore, necnon diſtantiam poli eclipticæ à Mundi polo, eſt enim vtraq, arcus Coluri ſolſtitiorum inter æquatorem, & tropicos, aut inter Mundi, & Zodiaci polos.

De alijs Sphæræ maximis circulis.

PVNCTVM XXII.

CIrculus verticalis, vel altitudinis, eſt maximus ſphæræ circulus ductus per centrum ſtellæ, & per Zentih, & Nadir loci, & polos habens in horizonte; dicitur circulus verticalis, quia per ipſum habentur ſtellarum diſtantiæ à vertice; diciturque & altitudinis, quia in eo ſyderum menſuratur altitudo, tantaque eſt ſtellæ diſtantia à vertice, quantus eſt arcus verticalis inter ſtellam, & verticem, & tanta eſt ſyderis ab horizonte altitudo, quantus eſt arcus verticalis inter ſtellam, & horizontem.

Tot ſunt verticales, quot puncta in horizonte,inter quos principaliores ſunt meridianus, & primarius verticalis, qui tranſire debet per puncta ortus, & occaſus æquinoctialis.

Declinationis circulus eſt circulus in ſphæra maximus tranſiens per polos mundi, & habens polos ſuos in æquatore, vnde ſecat ęquatorem ad angulos rectos, & vocatur circulus declinationis, quia ipſe menſura eſt declinationum ſtellarum, aut ſtellarum diſtantiæ ab æquatore.

Circulus latitudinis eſt maximus ſphæræ circulus cuius poli ſunt in ecliptica, ductus per polos eclipticæ, atq; adeo eam ſecans ad angulos rectos; vocaturque latitudinis circulus quoniam in eo menſuratur, & ſumitur latitudo ſtellarum, quę tanta eſt quantus eſt arcus huius circuli inter Eclipticam, & punctum quoduis cœli.

Horarij circuli ſunt maximi ſphæræ circuli habentes polos in æquatore ducti per polos æquinoctialis, & puncta æquatoris intercipientia quindenos gradus, vel ſingula horaria ſpatia, vnde ſunt omnes hi circuli declinationum, & non omnes circuli declinationum circuli horarij debentes diſtare inrer ſe per 15. gradus æquinoctiales.

De altitudine Poli, & Æquatoris.

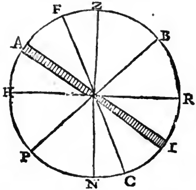
PVNCTVM XXIII.

SI quantitas arcus meridiani intercepti inter horizontem,& viſibilem polum,nempè poli altitudo ab horizonte loci quæratur,fiat ingreſſus in Catalogum appoſitum Ciuitatum, & ibi quæratur nomen loci, & ſub titulo, Latitudo, inuenietur gradus, & minutum pro altitudine poli quæſita; vt, quæratur altitudo poli Adrianopolis in Thracia. Ingreſs u facto in dictum Catalogum ordine alphabetico procedendo ſub titulo latitudinis, inuenio eam habere gr. 43. 12. quæſitæ altitudinis poli.

Etiàm ſi quęratur altitudo poli Bononię eodem medio ſcietur gr. 44. 29'; hancq; profecto tantam demonſtrant obſeruationes, vt ex Ephemeridibus Illuſtriſs. & Excellentiſs. Marchionis Maluaſiæ, & obſeruatis conſtat pag. 176. vbi elicit obſeruatam Bononiæ poli altitudinem ex ſtella polari per refractionem Caſſinianam correctam gr. 44. 29. 5'', & eamdem pariter colligit addendo maximam æquatoris diſtantiam ab Ecliptica, aut obſeruatam maximam Solis declinationem meridianæ Solis à vertice diſtantiæ in æſtiuo ſolſtitio, affertque hanc fuiſſe Anno

1656.

1656. die 21. Iunij, in magno gnomone in templo Sancti Petronij Bononiæ gr. 21. o. o. cum debitis correctionibus, & ſubiungit obſeruatam maximam Solis declinationem gr. 23. 29. 5. vnde fit altitudo poli Bononiæ gr. 44. 29. 5. quià hæc poli altitudo eſt æqualis diſtantiæ æquatoris à vertice, vt ſic conſtare non erit difficile: HR eſt Horizon, & æquator A I cuius axis BP, & Meridianus H Z R N in quo Z eſt Zenith, & N Nadir, & poli æquatoris, & Mundi B, & P his poſitis, probatur diſtantiam æquatoris A Z, à Z vertice æqualem eſſe portioni meridiani B R, quæ menſurat poli B noſtri diſtantiam B R ab horizonte: Quia Z R eſt quadrans, vtpotè Z polus Horizontis, erit gr. 90. Iterum quia B eſt polus æquatoris A I erit etiam arcus A B graduum 90. & quadrans, quare arcus A B, & Z R erunt æquales, vnde ſi arcus Z B ab ipſis dematur, quia ſemper demitur arcus æqualis remanebunt arcus æquales A Z diſtantiæ æquinoctialis à Z vertice, & B R altitudinis poli. Fiat arcus BR gr. 44. 29'. 5''. erit Z B gr. 45. 30'. 55'', qui ſubtractus à quadrante AB remanebit A Z gr. 44. 29'. 5''. vnde altitudo poli æqualis eſt diſtantiæ æquatoris à vertice.



Etiam pro Zodiaco intelligatur F G, vnde cognoſcetur arcus AZ, ex ſumma cognitorum A F, & F Z, ſed F Z eſt diſtantia Solis à vertice Z, & vt ſuprà eſt gr. 21. tantùm, & arcus AF menſurat maximam diſtantiam Eclipticæ F, ab equatore A, & vt ſupra obſeruatus eſt gr. 23'. 29. 5'. igitur innoteſcet A Z gr. 44. 29. 5''. & B R, vt A Z æqualis demonſtratus.

Vbi notare licet, quòd diſtantia æquatoris à Zenith latitudo regionis nuncupatur.

Hanc poli Bononienſis altitudinem alijs certis obſeruationibus comprobaueram, & primò, & eodem medio

Anno 1655. die 21. Iunij habeo ex Aſtronomia reformata fuiſſe Meridianas tangentes in templo noſtro Sancti Petronij limbi inferioris par. 38909. & ſuperioris 37870. ex radio 100000. igitur fuit diſtantia centri Solaris ab eo vertice gr. 21. o' 3''. ſed fuit eodem anno maxima Solis declinatio gr. 23. 29'. 11'', vt ex Caſſino aſſignante obliquitatis

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decrementum ſingulis annis, quare erit aſſumpta poli altitudo gr. 44. 29. 14'', à qua demptis 8''. ſec. competentibus diſtantiæ Solis in Meridie à puncto ſolſtitiali, erit vera poli altitudo gr. 44. 29'. 6''.

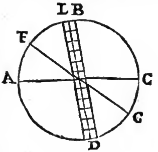
Anno 1658. die 21. Iunij pariter fuere tangentes 38906. & 37868. ex quibus elicitur fuiſſe diſtantiam centri ☉ à vertice correc. grad. 21. o, 16'', & Sol diſtabat à puncto Solſtitij circiter ſec. 7. declinationis, quare fuiſſet vera Meridiana à vertice diſtantia gr. 21. o'. 9''. quibus addita maxima ☉ declinatione obſeruata gr. 23. 28'. 55'' erit poli altitudo g. 44. 29'. 4''.

Anno 1665. fuere correctæ tangentes eodem die 38905. & 37869. vndè diſtabat ☉ à vertice gr. 21. o'. 1''. diſtantia à Tropico in declinationem fuit ſec. 2'', & maxima declinatio gr. 23. 29'. 6''. vndè eſt poli altitudo gr. 44 29'. 5'.

Anno 1667. eadem die ſerenâ fuere tangentes 38907. & 37872. vnde diſtabat centrum ☉ à vertice gr. 21. o'. 3'. diſtantia ☉ a ♋ in declinationem ſec. 2', & maxima declinatio ☉ gr. 23. 29'. 3''. ergo altitudo poli gr. 44. 29'. 4''.

Eodem die anno 1668. fuerunt tangentes 38908. & 37869. vnde diſtantia centri ☉ à vertice gr. 21. o. 4''. diſtantia ☉ à ♋ in declinationem ſec. 7. & maxima declinatio gr. 23. 29. 8. ergo poli altitudo gr. 44 29'. 5''.

Vt hæc poli altitudo comprobetur per aliud medium ſit ABCD meridianus circulus ED æquator, & FG Zodiacus, & ſit Vertex in B quare EB erit diſtantia æquatoris à vertice æqualis altitudini poli; hæcque inueniri poterit ſi daretur FE, & arcus FB remaneret arcus EB diſtantiæ æquatoris F à Zenith B: Tempore ſolſtitij hyemalis datus eſt FB, & anno 1656. die 21. Decembris gr. 67. 58'. 10''. vt ex tangente limbi inferioris 250050. & ſuperioris 243440. ex radio 100000. quibus competunt arcus gr. 68. 12'. 9''. & gr. 67. 40' 5''. qui ſi corrigantur per exceſsum refractionis à parallaxi ☉ Caſsiniana min. 2. 6''. & min. 2. 1'', erunt veræ diſtantiæ limborũ ☉ à vertice gr. 68. 14'. 15''. & gr. 67. 42'. 6''. & proinde vera centri ☉ à vertice diſtãtia gr. 67. 58'. 10''; ſed arcus FE obſeruatus fuit, vt ſupra gr. 23. 29. 5''. ergo arcus EB gr. 44. 29 5''. altitudinis poli, & ☉ parum diſtabat ab initio ♑.



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Anno 1663. die 21. Decēbris fuerunt tangentes 243357. & 249970. vnde fuit vera diſtantia centri ☉ à vertice gr. 67. 57'. 47", vel gr. 67. 57'. 48", quia ☉ à ♑ diſtabat per ſecundam declinationis, etiam arcus FE maxima Solis declinatio fuit gr. 23. 28'. 43"., quare poli altitudo gr. 44. 29'. 5".

Inuentâ diſtantia æquatoris à vertice, ſi dematur à quadrante, remanebit æquatoris ab horizonte altitudo, quæ nunc eſſet gr. 45. 30'. 55". & ſic inuentis aliorum locorum poli altitudinibus æqualibus diſtantiæ æquatoris à vertice loci, & demptis à gr. 90., cognoſci poteſt altitudo æquatoris aſſumpti loci à ſuo horizonte.

Declinationem cuiuslibet puncti cœleſtis cogniti in Zodiaco, & in longum, & in latum inuenire.

PVNCTVM XXIV.

PVncta cęleſtia, quæ verè non inſunt æquinoctiali circulo dicuntur declinare, eſtque declinatio puncti cœleſtis diſtantia ab æquatore, quæ tanta eſt, quantus eſt arcus interceptus inter Æquatorem, & ſtellam, qui arcus eſt portio arcus totius ducti à polo mundi per centrum ſtellæ ad Æquatorem; pro quo in hac figura eſt meridianus AIED, ſunt D, & H poli mundi, C, & I poli Zodiaci, vnde Æquator eſt PR, & Zodiacus AE, eſtque puncti in principio ♍ declinatio arcus GL, totius arcus quadrantalis ducti à polo mundi D. Amplius ſtellæ poſitę in M declinatio eſt arcus M O totius arcus M D ex D polo.

Longitudo puncti cęleſtis eſt arcus Eclipticæ ab initio Arietis numeratus verſus ortum, vſq; ad circulum latitudinis tranſeuntem per punctum cęli, aut vſque ad circulum maximum ductum per polos Eclipticæ, & punctum cęli, vt in figura longitudo ſtellæ M eſt arcus NV limitatus à quadrante CN à polo Eclipticæ C, per centrum ſtellæ M, & per Eclipticam in N ducto ad M, quia ſupponitur ſtellam habere meridianam latitudinem. Pars circuli latitudinis ſtellæ in M eſt C M ex polo C eclipticæ, M centro ſtellæ ad punctum N in ecliptica correſpondens.

Vndè quantus eſt arcus N M tanta eſt ſtellæ M latitudo, & diſtantia centri ſtellæ M ab Ecliptica.

Stellarum latitudo, ſi ſit verſus polum arcticum nuncupatur borealis, ſi ſit verſus polum antarcticum Meridiana, &c.

Vt cognoſcatur per appoſitas tabulas, an aliquod punctum cœli patia-

tiatur declinationem, primò debet ſciri illius puncti cęleſtis longitudo, & latitudo, ſi quam habet, vt & dicetur, & adeundæ erunt tabulæ declinationum, quærendo ſignum, & gradum talis puncti cęleſtis in latere ſiniſtro tabulæ, ſi fuerit in medietate Zodiaci deſcendente, quæ incipit à ♋ per ♎ vſque ad ♑, vel in dextro, ſi in medietate aſcendente, vtpotè à ♑ per ♈ vſque ad ♋, latitudinem autem, ſi quam habet, in latere ſuperiori tranſuerſo; & in area communi, aut ſpatio latitudini, & longitudini directo habebitur declinatio quæſita, quæ talem habebit denominationem Septemtrionalis ſcilicet, vel Meridianæ, qualem habebit latitudinem tale punctum cœleſte, niſi tamen in tabula declinationum antecedet S, nam tunc eſſet ſignum, quòd tale punctum cęlicum, etſi haberet latitudinem Meridianam, haberet declinationem Sptemtrionalem, vt S docebit, atque etſi haberet latitudinem Septemtrionalem haberet meridianam declinationem, vt ex M diſcetur, & quià declinationum tabulę, ſuppoſitâ vndequaque maximâ Solis declinatione gr. 23. cum dimidio, vt ferè omnibus ſatisfaciente ſupputatę ſunt ad ſolos integros gradus, ideo ſi graduum partes aliquæ adhæſerint, duplici introitu agendum erit ad venandam proportionem, nempè partem competentem graduum fractionibus differentiæ, quæ eſt inter vnum, & alterum gradum; dixi duplici introitu, nam ſi aliquæ eſſent particulæ in longitudine, & latitudine Planetæ, aut alterius puncti cęleſtis non excedentis tamen nouem gradus latitudinis, intrandum eſſet primo lõgitudine, & latitudine proximè minoribus, & angulus communis extrà eſſet adnotandus, & conferendus ad numerum immediatè ſequentem inferiorem, ſcilicet ſi logitudo Planetæ in latere ſiniſtro tabulæ accepta fuerit, aut ſuperiorem ſi in latere dextero, & de differẽtia horum numerorum, quæ habetur ex ſubductione minoris à maiori, ſumenda eſſet pars proportionalis angulo communi addenda ſi numerus ſequens ipſo angulo communi maior fuerit, ſubtrahenda verò ſi minor, quæ pars proportionalis, etiam ſeruanda eſſet cum notâ additionis, vel ſubtractionis ſicuti operatio dictabit; Similiter conferendus eſt angulus communis dictus ad numerũ ei collateralem verſus ſiniſtram quidem ſi latitudo fuerit Septemtrionalis, at verſus dextram ſi meridiana, & de differentia anguli communis, numeriq; collateralis accipienda eſt pars proportionalis, quę, ſi numerus collateralis angulo communi maior fuerit eſſet addẽda, demenda verò ſi minor, vnde illæ duæ partes proportionales coniungendę eſſent, ſi vel ambæ fuerint addendæ, vel demendæ, & ſumma earum angulo communi eſſet addenda, ſi addendæ fuerint, aut demen-

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da ſi ſubducendæ, & orivetur vera quæſita declinatio.

Quod ſi ex his duabus partibus proportionalibus vna addenda eſſet, & altera ſubtrahenda,& inter ſe fuerint æquales,angulus communis erit declinatio quęſita; at ſi illę duę partes proportionales inęquales erunt, differentia earum addetur angulo communi,ſi maior pars proportionalis addenda erat, aut demetur ſi maior minuenda erat, & inuenietur quęſita declinatio.

Quod ſi accidat declinationem mutare denominationem, tunc coniungenda eſſet declinatio proximo minori gradui competens cum ea gradus immediatè ſequentis, & de ſumma accipienda eſt pars proportionalis, quę ſi erit minor declinatione competente gradui minori, erit illius denominationis, contrarię verò ſi eam ſuperaret.

Si tale punctum cęleſte nullam habuerit latitudinem, intranda eſſet tabula declinationum dicta cum vero loco in longitudinem talis puncti, nam ex eius directo in columnula ſupra quam nullus ſcribitur numerus latitudinis adhibitâ parte proportionali ſi adſint graduum fractiones, eſſet, quę quęrebatur declinatio.

Ad maiorem rei dilucidationem; Quęrenda ſit declinatio ☉ poſiti in gr. 5. 54'. ♍; Quia ſol numquam aliquam habere poteſt latitudinem, quęrendum erit ſignum ♍ in tabulis declinationum, & in directum gr. 5., & ſub columna o. ſic venabitur talis loci, & ☉ declinatio.

Declinatio competens gr. 5. ♍ gr. 9. 42.

Declinatio competens gr. 6. ♍ gr. 9. 20.

Differentia, quæ ſemper habetur ex ſubtractione minoris à maiori declinatione, gr. o. 22. Modò quæritur quanta pars de differentia min. 22. quæ eſt inter gr. 5. & 6. ♍ poſſit competere min. 54. quæ ſunt inter gr. 5, & 6. ♍ quæ vt habeatur cũ numero 22. 54. ingrediatur tabula ſexagenaria, vt ſupra, & proueniet pars competens 54. minutis, 19. minutorum,& 48. ſecund. quibus acceptis pro minuto integro, demantur facta 20. minuta à maiori declinatione, declinatio enim defficit ad incrementum graduum longitudinis, & fiet quæſita ☉ declinatio gr. 9. min. 22. quæ, quia Sol eſt in prima Zodiaci medietate dicetur Borea, vel Septemtrionalis, ſi enim eſſet in vltimis ſex Zodiaci ſignis diceretur Auſtralis, vel Meridiana.

Clariùs per auream regulam trium quantitatum iſta pars proportionalis, & altera quælibet elici poteſt, poſita nempè pro numero primo quantitate, ex qua tota differentia prouenit, pro ſecundo ipſa tota differentia, & pro tertio parte eius totius, ex quo tota oritur differentia,

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& multiplicando ſecundum per tertium, productum diuidendo per primum, erit in quotiente pars quęſita proportionalis, vt ex. gratia numerus dans totam differētiam ſunt min. 60. vtpotè diſtantia inter gradum, & gradum, quare 60. fiet primus numerus, inuenta differentia tota min. 22. pro ſecundo, & pro tertio min. 54. adhærentia gr. 5. ♍ : vndè ſi min. 60. competunt min. 22, quæ horum min. 54. competent? multiplicentur 22. per 54. & prouenict 1188. quod per 60. diuidatur, & erit quotiens min. 19', & ſec. 48". pro parte, vt ſupra proportionali.

Trigonometricè habetur hæc declinatio per rectangulum in L triangulum GLV quo connotat V, punctum æquinoctiorum, vnde notū eſt crus IM diſtantia ſtellæ, alteriuſuè puncti cœleſtis ab æquinoctio, etiam notus eſt angulus LVG, qui tantus eſt, quantus ſit arcus AP, inſuper & notus rectus angulus GLV, vtpotè ex polo D mundi ad PQ æquatorem, quare quæri poteſt ex his crus LG menſurans ſtellæ poſitæ in G declinationem GL, ſi fiat vt ſinus totus competens recto angulo GLV, ad ſinū cruris VG, ita ſinus anguli LVG, ad quartum ſinum exhibentem arcum GL declinationis. Pro exemplo quæratur declinatio ☼ in gr. 5. 54'. ♍, vt comprobetur, an tabulæ correſpondeant veritati trigonometriæ, quare quia ☼ in gr. 5. 54 ♍ diſtat à proximiori æquinoctio gr. 24. 6. erit cognitum crus GV, etiam quia arcus AP ſupponitur gr. 23. 30. erit notus angulus LVG, gr. 23. 30. vnde vt 100000. ad ſinum VG par. 40833. ità ſinus anguli LVG. 39875. ad 16282. ſinum arcus LG, cui còmpetit arcus gr. 9. m. 22. Per logorithmos addatur logorithmus maximæ declinationis cum logorithmo diſtantiæ ab æquinoctio proximiori, & demptâ à ſiniſtris vnica vltima vnitate habebitur logorithmus, cuius arcus erit declinatio quæſita; logorithmus maximę declinationis grad. 23. 30. eſt 960070. qui additus cum logorithmo gr. 24. 6. diſtantiæ ☼ in aſſumpto exemplo à ♎ proximiori ęquinoctio 961101. fiet, vnica demptâ à ſininiſtris vnitate, logorithmus 921171. cui competit, vt in alijs, arcus gr. 9. 22'.

Rurſus quærenda ſit declinatio ex. gra. ☿ conſtituti in gr. 2. 52' ♍ cū Meridiana latitudine, gr. 3. m. 1. Operatio talis erit.

Declinatio gr. 2. ♍ ſub gr. 3. latitudinis Meridianæ gr.	8. 0.
Declinatio gr. 3. ♍ ſub gr. 3. latitudinis Meridianæ gr.	7. 38.
Differentia earum	0. 22.

cuius proportio pro min. 52. demenda à maiori eſt gr. 0. 19. 4". nam declinatio deficit, prætermiſſis 4. ſecundis fiet declinatio ☿ gr. 7. 41' cum gr. 3. latitudinis Meridianæ, at quia non ſolum ☿ aſſignatur mo-

modo gr. 3. latitudinis dictæ, at etiam min. 1, ideò pro eo debebit inquiri, hoc medio proportio.

Declinatio gr. 2. ♍ ſub gr. 4. latitudinis Meridianæ gr. 7. 3.
Declinatio gr. 3. ♍ ſub gr. 4. latitudinis Meridianæ gr. 6. 42.
Vndè earum differentia gr. o. 21.

cuius proportio pro min. 52. eſt gr. o. 18'. 12''; hæc, relictis 12. ſecundis, ſi ſubducatur à maiori, nam declinatio deſſicit, fiet declinatio loci dicti ☿ ſi haberet gr. 4. dictæ latitudinis, gr. 6. 45. quamobrem, cum ☿ non habeat ſolum gr. 3. dictæ latitudinis, at nec gr. 4. ſed gr. 3. & min. 1. ideò ſic illis inuentis pro tali latitudine quæri poteſt declinatio · ſubducatur declinatio minor inuenta à maiori, nempè ea declinatio, quam haberet ☿ ſi haberet gr. 4. latitudinis ab altera, quam haberet, ſi haberet ſolum gr. 3. dictę latitudinis, & ex differentia ſumatur proportio pro minutis adhærentibus latitudini, vt hic eſſe accidit vnicum minutum, fietque vera declinatio ☿, vt ſequitur.

Declinatio, quę competeret ☿ ſi haberet gr. 3. dictę latitudinis gr. 7. 41'.
Declinatio, quę competeret ☿ ſi haberet gr. 4. dictę latitudinis gr. 6. 45.
Vndè harum differentia gr. o. 56.

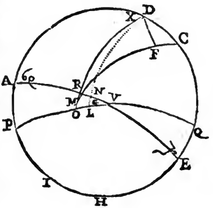
cuius proportio pro min. 1. eſt ſecundarum 56''. vel vnius minuti; hæc igitur proportio ſi ſubtrahatur, nam declinatio pariter deſſicit, à maiori, fiet vera declinatio ☿ gr. 7. 40., quæ, quia ☿ habet latitudinem Meridianam, alio iam non obſtante dicitur Meridiana ſicuti in titulo Tabulæ.

Quod ſi hæc declinatio, per ductricem trigonometriam ſupputari velit, vt alia quælibet, ſupponatur eſſe ☿ in M, & pars A I E, intelligatur eſſe Meridionalis, & ducatur arcus C M ex polo C, Zodiaci, determinans longitudinem ☿ in N, & demonſtrans ipſius latitudinem M N, ex. gratia gr. 3. 1'. Meridionalis, quare ſi MN, eſt gr. 3. 1'. eſtque CN, quadrans, erit totus arcus CM, gr. 93. 1'. Etiam ex polo mundi D ducatur declinationis circulus DO, per cētrum M vnde factum erit triangulum MDC, in quo CM, vt ſupra eſt gr. 93. 1', & crus D C, diſtantia polorum gr. 23. 30. eſtque notus angulus MCD, menſuratus à portione Eclipticæ N A, diſtantia aſſumpti puncti à ♋, quæ erit, ſi quæratur declinatio gr. 2. 52' ♍, gr. 62. 52. & tantus erit angulus MCD, vndè quæri poteſt crus M D, cuius complementum M O, nam DO eſt quadrans, erit quæſita declinatio.

Quęratur declinatio ☿ aſſumpti exempli in gr. 2. 52' ♍ cum Meridiana latitudine gr. 3. 1, vndè intelligitur eſſe ☿ in M, in parte antarctica

AHE, deinde ex obliquo angulo MDC, ducatur perpendiculum XF,& facta erunt rectangula triangula DFC, & DFM, quorum auxilio ex crure DC, & angulo DCF, inuenitur FC, gr. 11. 13. vndè FM remanebit gr. 81. 48. cum quibus eſt XM, gr. 82, 20. & MO complementum, gr. 7. 40. declinatio ☿ quæſita, vt ſic patere poterit.

In rectangulo triangulo DFC, vt ſinus totus 100000. ad ſinum complementi anguli FCD, gr. 27. 8'. qui eſt 45606. ſic tangens Hypothenuſæ DC. gr. 23. 30. & 43481. ad tangentem cruris FC, 19830. cuius arcus FC eſt gr. 11. 13. qui demptus à toto crure MC gr. 93. 1. facit remanere MF gr. 81. 48. quare vt ſinus ſecundus FC 98090. ad ſinum ſecundum FM 14263. ita ſecundus ſinus DC, 91706. ad ſinum ſecundum MD 13335. cuius arcus MD eſt gr. 82. 20. quare MO gr. 7. 40.



Per logoritbmos ex Caualerio pag. 40.

Anguli vertic. MCD, Tom.	1034098		
Crus minus DC. Meſ. 2.	1036170	Lon. 2.	996240
Quare FC. gr. 11. 13. Meſ. 2.	1070260	Tomolog.	1000838
Crus maius CM gr. 93.			
Ergo FM 81. 48.			
& DM gr. 82. 20.		Log. 2.	915421
& ſemper MO gr. 7. 40.		Tomolog.	912499

Quod ſi quærenda fuiſſet declinatio alicuius cęleſtis puncti, quod fuiſſet in gr. 13. ♍ cum gr. 8. latitudinis Meridianæ, ea inuenietur eſſe min. 42. ſed cum denominatione Septemtrionali, vt in tabulis S præcedens, Quod etiam cognoſci poteſt ex calculo, cum inuento FC, & dempto à toto CM, quod remanet excedat quadrantem, dum habita eſt latitudo Meridiana, quæ ſi Sptemtrionalis haberetur, & FM à quadrante deffi-ceret, declinatio euaderet Meridionalis.

Pro tempore in gradus Æquatoris conuertendo, & è contrario.

PVNCTVM XXV.

ÆQuinoctialis circulus horis 24. ſuum motum æqualem concludit, & gr. 360. terminat; quare treminabit horis 12. gr. 180. horis 6. gr. 90. & horis ſingulis gr. 15. vt & ex regula aureâ.

Facta eſt tabula conuertendi horas, minuta, ſecundas, &c. in gradus, minuta, ſecundas, &c. Æquatoris, per quam facilimè datum tempus mutari poteſt in partes Æquatoris, quærendo in latere ſiniſtro horas, vel minuta, & accipiendo verſus dexteram gradus, vel minuta Æquatoris illis correſpondentia. vt exempli gratia ſint horæ 13. min. 30. & 45'. ſec. conuertendæ in gradus Æquatoris; cerno horis 13. competere gr. 195; min. 30. gr. 7. 30: & ſec. 45. min. 11. & ſec. 15. vndè horum ſumma gr. 202. 41'. 15''. eſt tempus dictum in gradus Æquatoris.

At ſi daretur tempus æquatoris gr. 202. 41. 15''. in noſtrum tempus conuertendum quærantur ſub titulo graduum Æquatoris proximè minores gr. 202. & inuenientur horæ 13. quibus competunt gr. 195. qui ſuhtracti à gr. 202. 41. 15. debent remanere gr. 7. 41. 15''. hi rurſus quærantur in tabula, & inuenientur proximè minora min. 30. quibus competunt gr. 7. 30. qui dempti à gr. 7. 41. 15. relinquunt min. 11. 15''. quæ in tabula exhibent ſec. 45.

Rectam Stellarum Acenſionem indagare.

PVNCTVM XXVI.

INquirere rectam aſcenſionem nihil aliud importat, quàm inuenire arcum æquatoris coorientem, aut competentem alicui arcui Eclipticæ in recta Sphæra.

Vt in figura puncti 24. poſito Stellæ centro in N. arcus LV, eſt ipſius aſcenſio recta, quæ elicitur per Trigonometriam conſiderando rectangulum ad L triangulum NLV in quo cognitus eſt angulus NVL, & latus NV diſtantia Solis æquinoctio V; fiat ergo vt 100000. ad ſinum complementi anguli GVL gr. 66. 30 & 91706. ſic tangens hypothenuſæ NV 44732. tangens gr. 24 6' (quæritur enim recta Solis aſcenſio in in gr. 5. 54. ♍) ad tangentem 41022, cui competunt gr. 22. 18, nempe por-

portio æquatoris LV; quare ſic poſito Sole ipſe diſtabit quò ad longitudinem ab æquinoctio ♎ gr. 24. 6. & quò ad æquatorem in ſphæra recta gr. 22. 18. vnde excedetur ☉ longitudo gr. 1. 48. ac ſi eſt Solis longitudo, quæ à principio ♈ numerari incipit gr. 155. 54. ſicuti & omnes aſcenſiones, erit recta ☉ aſcenſio gr. 157. 42. quęſita.

Etiàm per idem rectangulum triangulum ex hypothenuſa GV diſtãtia ☉ ab æquinoctio ♎ gr. 24. 6. & crure GL haberi poteſt aſcenſio recta ☉ LV; eſtque GL declinatio ☉ inuenta ſuperius gr. 9. 22'. fiat vt ſinus complementi cruris dati GL gr. 9. 22. & 98667. ad 10000. ſic ſinus complementi GV ad 92517. quare erit LV gr. 22. 18.

Per logorithmos primus modus abſoluitur addendo logorithmum complementi anguli maximæ declinationis gr. 23. 30. nempè 996240. meſologorithmo diſtantiæ ab æquinoctio in noſtro caſu 965062. & productum, dempta vnitate pro radio, erit 961302. meſologorithmus arcus LV gr. 22. 18.

Secundus modus abſoluitur iungendo logorithmum ſecundum cruris GL 999417. cum Tomologorithmo hypothenuſæ NV 1003961. & fit tomologorithmus alterius cruris LV, dempta pro radio vnitate, 1003378, cuius arcus LV eſt pariter gr. 22. 18. vnde & ſemper recta ☉ aſcenſio gr. 157. 42'.

Per appoſitas tabulas quæritur aſcenſio recta alicuius puncti cœleſtis hoc modo: Cognitus talis puncti, & nunc ſupponamus Solis, locus in Ecliptica quæratur per tabulas domorum, vſq; quò inueniatur ſub columna dictâ decimæ, & adhibita proportione, vt dicetur patebunt horæ in fronte, & in latere minuta, & nil aliud, nam ſecundæ &c. elici debent per partem proportionalem.

Sit quærenda aſcenſio recta ☉ poſiti in gr. 5. 54. ♍. Quæro igitur tabulas domorum, & ſub columna decimæ quærito gr. 5. 54. ♍, & hos præciſè inuenio includi inter min. 30. & 31. horarum 10. ſupra adnotatarum, nam horis 10. & min. 30. competunt gr. 5. 41. ♍, & horis 10. & 31, gr. 5. 57'. ♍, & in his intercipiuntur gr. 5. 54. ♍, quare erit tota differentia min. 16, & pars differentiæ min. 13, cum quibus in tabula ſexagenaria acceptis min. 16. in fronte, & ſub 16. quærendo 13, inuenio numerum proxime minorem min. 13. eſſe 12'. 48'', & eſſe huius in directum 48. nempè ſec. 48. nàm ſecundæ ſequuntur minuta; deinde ſi demantur min. 12. 48. à min. 13. remanebunt ſec. 12, quibus competent eodem modo tertiæ 45, vnde aſcenſio recta Solis erit horarum 10. min. 30. 48''. 45'''. quæ ſi conuertatur per caput antecedens in gradus æquatoris, erit

vt

vt ſupra recta ☿ aſcenſio gr.157. 42. 11'. 15'', fractiones enim minutorum contemptæ fuerunt in antecedentibus ſupputationibus; aut dicatur per auream regulam, ſi 16. tota differentia dat 60, quid 13. pars differentiæ? & per auream regulam inuenientur ſec. 49. circiter.

Modus inueniendi Cœli mediationes cuiuslibet puncti in Cœlo.

PVNCTVM XXVII.

SI neceſſe ſit inuenire rectam aſcenſionem ſtellarum habentium aliquam latitudinem, vnde & melius cœli Mediationem, niſi latitudo quęſita tranſeat gr. 9, haberi poterit per tabulam cœli mediationum appoſitam ingrediendo ipſam cum ſigno, & gradu, & huius fractionibus, ſi adſint, pro quibus pars proportionalis adhiberi debebit in latere, & cum latitudine, & ſua denominatione in fronte ſub gradu latitudinis, & adhibita parte proportionali, ſi eſſent gradibus iunctę fractiones, & verè, vt dictum fuit pro inquirēda declinatione ſtellarum latitudinem habentium, & per tabulas erit cognita ſtellæ cœleſtis mediatio.

Mediatio cœli eſt punctum Eclipticæ tranſiens per meridianum cum aliqua ſtella.

Quæratur mediatio cœli ☿ in gr. 2. 52. ♍ cum gr. 3. 1'. latitudinis Meridianæ.

Mediationes cæli gr. 2. ♍ H. 10. 11'. 40.
Sub gr. 3. latit. Merid. gr. 3. ♍ H. 10. 15. 24.
Differentia H. 0. 3. 44.
52. min. longitudinis

2. 36.
38.

Pars proportionalis 3. 14. vnde

Mediatio cœli gr. 2. 52. ♍ cū gr. 3. 6. latitudinis meridianæ h. 10. 14. 54'.
Mediationes in gr. 2. ♍ H. 10. 10. 16. ſub gr. 4. latitud. Merid.
in gr. 3. ♍ H. 10. 14. 0.
Differentia H. 0. 3. 44.
Pars proportionalis H. 0. 3. 14. vnde
Mediatio Cœli gr. 2. 52. ♍ cum gr. 4. latitudinis Meridianæ H. 10. 13. 30.

Hęç

Hæc cœli mediatio, vt minor ſubtrahatur à maiori mediatione gr. 2. 52. ♍ cum gr. 3. latit. Merid. h. 10. 14. 54. & erit differentia 1. 24''. quorum proportio pro vnico minuto eſt ſec. 1. 24'''. ſed his prętermiſſis, dematur ea ſecunda à maiori Cęli mediatione h. 10. 14. 54, nam deficit Cœli mediatio augmento graduum latitudinis, eritque vera Cœli mediatio gr. 2. 52. ♍ cum gr. 3. 1. latit. Meridianæ horarum 10. 14'. 53'', quæ in gradus Æquatoris ſunt 153. 43'. 15''.

Inquiritur trigonometricè per obliquangulum triangulum ODC, in quo CD eſt diſtantia maxima polorum, æqualis maximæ ☉ declinationi, CM eſt gr. 93. 1. aggregatum ſcilicet quadrantis, & latitudinis Meridianæ ☿ gr. 3. 1. & comprehenſus angulus M C D gr. 62. 52. quare haberi poteſt angulus MDC, qui tantus eſt, quanta eſt portio æquatoris OQ, quæ cognita, & dempta à gr. 270. eſt enim angulus MDC vſq; ad ♑, remanebit mediatio cęli ☿ ſic ſuppoſiti ab ♈ principio, vt fieri debet, computata.

Exemplum per logoritmos.

Crus MC gr. 93. 1.
Crus DC gr. 23. 30.
Summa gr. 116. 31.
Differentia gr. 69. 31.

Medium ſummæ gr. 58. 15'. 30''.	Tom.	1027894.	To. 2.	1007034
Media differentia gr. 34. 45'. 30''.	Log. 2.	091464.	Log.	975596.
Medium dati ang. gr. 31. 26'.	Meſ. 2.	921382.	Meſ.	1021392.
Semiſumma anguli gr. 68. 38'. Meſ.		1040740.		
Semidifferentię eorum gr. 47. 39.	Meſ.			1004012:

Vnde angulus ODC gr. 116. 17. & portio ęquatoris OQ, qua dempta à gr. 270, vt ſuprâ, remanebit mediatio cœli ☿ gr. 153. 43, fietque operatio ſubtilior à requirente minimas partium fractiones.

Per ſinus: vt ſinus ſecundus medię ſummę crurum gr. 58. 15. 30. & 52608. ad ſinum ſecundum ſemidifferentię gr. 34. 45. 30. & 82156. ita tangens ſecunda ſemianguli verticalis 163612. gr. 31. 26. ad tangentem ſemiſummę angulorum ad baſim MD 255507. cui competunt gr. 68 38. Rurſus vt ſinus 85043. ſemiſummę crurum MC, & DC ad ſinum eorumdem differentię medię 5701. à gr. 34. 45. 30. ita tangens ſecunda ſemianguli verticalis 63612. ad tangentem ſemidifferentię angulo-
rum

rum ad baſim MD 109684. & gr. 47. 39. vnde totus angulus ODC maior, vtpotè à maiori latere ſubtenſus, ex 42. triangulorum lib. 3. Monte Regij, gr. 116. 17. vt ſuprà.

Obliquam Stellarum aſcenſionem numerare.

PVNCTVM XXVIII.

Aſcenſio obliqua eſt arcus ęquinoctialis cooriens alicui arcui eclipticę in obliqua ſphęra.

Aſcenſionum diuerſitas oritur ex diuerſitate ſituationis ęquatoris, nam in ſphęra recta erigitur ſupra horizontem ad angulos rectos, & per verticem tranſit, & in obliquis ſphæris facit cum horizonte acutos angulos, qui variant, prout variat obliquitas ſphęrarum, & proinde aſcenſiones rectę, & obliquę producuntur.

Inuenitur quantitas obliquæ aſcenſionis in obliqua ſphęra quà eleuetur polus grad. 44. 29. per tabulas domorum, quęſitus enim Zodiaci locus, cuius quæritur aſcenſio obliqua ſub columna horoſcopi exhibebit in fronte horas, in latere minuta, & ſecundas per proportionem regulæ trium, aut per tabulam ſexagenariam, & ſic cognoſcetur quæſita aſceſio obliqua, in gradus reductis ijs horis, & fractionibus in gradus æquatoris per punctum 25.

Si altitudo poli ſit gr. 40. 23. idem fiat, at ſub columna duodecimæ, aut ſecundæ in dictis tabulis domorum.

Si pariter altitudo poli ſit gr. 26. 9. in domorum tabulis eædem erunt operationes, at ſub columna vndecimæ, aut tertiæ.

Debent tamen inuentis horis addi duę horę, ſi adhibeatur columna vndecimę, quatuor ſi duodecimę, ſex ſi horoſcopi, octo ſi ſecundę, & decem ſi tertię, & ſi producatur ſumma maior h. 24. prętermittantur horę 24. & reliquum erit aſcenſio vera, & obliqua quęſita, vt exempli gratia debeat inueniri aſcenſio obliqua gr. 8. 45. ♋ in altitudine poli gr. 44. 29. quare ſub columna horoſcopi in tabulis domorum video ijs competere hor. 22. 58. & ex proportione ſec. 30; his additę horę ſex dant horas 28. 58. 30; à quibus demptis horis 24, remanent horę verę, & fractioaes obliquę aſcenſionis 4. 58. 30., quę conuerſę in gradus ęquatoris, ſunt gr. 74. 37. 25. aſcenſionis obliquę quęſitę.

Etiam quęratur aſcenſio obliqua propoſiti loci ☼ eadem poli eleuatione in gr. 5. 54. ♍, & inuenio ſub horoſcopi columna h. 3. 53. 8, & pro-

 por-

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portionabiliter ſec. 33, quibus adiunctæ horæ 6. conſtituent veram ☉ obliquam aſcenſionem h.9. 53. 33, quæ in gradus æquatoris ſunt grad. 148. 23. 15.

Alio modo inuenitur aſcenſio quælibet obliqua ex cognita aſcenſionali differentia, quæ eſt differentia inter aſcenſionem rectam alicuius partis eclipticæ, & eiuſdem obliquam aſcenſionem in obliqua ſphæra.

Per tabulas has inuenitur intrando tabulam poſitionum, & directionum cum inuenta declinatione puncti, cuius quæritur aſcenſio obliqua per punctum 24. hoc modo abſoluto ab vnico gradu eleuationis poli vſque ad gr. 44. 29.

Si declinatio quęratur in gradibus aſcendentibus declinationis, aut vbi dicitur declinatio ſeptemtrionalis, ſubtrahetur ab inuento numero ille inuentus, qui eſt in directum gr. o. declinationis, & in fronte, ſub poli data eleuatione proueniensq; erit tempus, quod ductum in grad. æquatoris per 25. huius, oſtendet quæſitam differentiam aſcenſionalem.

At ſi quæratur in gradibus deſcendentibus procedet exaduerſo operatio.

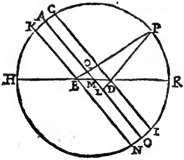
Inuenta aſcenſionali hac differentia, ſi ſtella, cuius quęritur obliqua aſcenſio erit ab ♈ per totum ſigum ♍, ab aſcenſione recta ipſius ſubtrahetur, & erit quæſita aſcenſio obliqua, atq; ſi erit à ♎ per totum ſignum ♓, vt ſimilis proueniat, aſcenſioni rectæ differentia aſcenſionalis adiungetur.

Quæratur aſcenſionalis differentia loci ☉ ſupra cum gr. 9. 22. declinationis in altitudine poli gr. 44. 29'. adhibita declinatione dictâ Septemtrionali accipio in fronte gr. 44. 29'. & in latere gr. 9. & aſpicio horum in directum hor. 6. 35. 48., quæ demptæ à gr. 10. declinationis, nempè hor. 6. 39. 52., dant differentiam pro parte proportionali min. 22, 4'. 4''. cuius proportionalis pars pro minut. 22. quæ eſt minut. 1. 29. addita numero grad. 9. declinationis, nam ille numerus augetur nempè hor. 6. 35. 48. conſtituit numerum verum infrà explicandum hor. 6. 37. 57''. à quibus ſublatæ hor. 6. competentes gr. o. declinationis ſub grad. 44. 29. dant remanere h. o. 37'. 57''. nempè in gradus æquatoris gr. 9. 19. 15''. quanta eſt quæſita aſcenſionalis differentia; hæc igitur auferatur ab aſcenſione recta ☉ inuenta in 26. huius gr. 157. 42. contemptis ſecundis, quiâ ☉ eſt inter ♈, & ♎ remanebit obliqua Solis aſcenſio quæſita gr. 148. 23. vt ſuprà.

Sed faciliùs hanc Aſcenſionalem differẽtiam inuenies per appoſitas quo-

quoquè proprias differentiarum Aſcenſionalium tabulas,intrando ſcilicèt eaſdem cum declinatione ſtellæ in latere, & cùm altitudine poli, ſiuè circulo poſitionis eiuſdem ſtellæ in capite.

Pro venanda hac aſcenſionali differentia trigonometrice ſit in appoſito ſchemate meridianus HCRO, horizon HMR. Æquator AMO eiuſque parallelum Auſtrale KBN, & boreale CDI horum ad communem, cum horizonte ſectionem DB protrahantur ex P polo æquatoris, vſque ad æquatorem arcus declinationum P B, & P D L, vnde D L cognoſcetur declinatio borea puncti D, & ML differentia aſcenſionalis, & ſic BQ declinatio auſtralis puncti Orientis, aut Occidentis in B & illius differentia aſcenſionalis arcus æquatoris QM.



Pro habenda differentia hac conſideretur triangulum BQM rectangulum ad Q, in quo notum eſt crus B Q per cognitam declinationem, cognituſque eſt angulus BMQ, dempta poli P altitudine à quadrante, ſic enim datur æquatoris depreſſio RO, cui æqualis eſt altitudo HA pro menſura angulorum B M Q, & L M D, quare poſſunt inueniri crura differētiæ aſcēſionaiis QM, & M L, meſologorithmo cruris dati addendo meſologorithmum ſecundum anguli oppoſiti, nempè addendo meſologorithmo declinationis inuentæ meſologorithmum ſecundum complementi altitudinis poli, vnde fiet logorithmus cruris alterius. Meſologorithmus inuentæ declinationis ☼ gr. 9. 22. eſt 921736. & meſologorithmus ſecundus complementi altitudinis poli grad. 44. 29'. eſt 999217. eſt igitur logorithmus differentiæ aſcenſionalis 924953. cuius eſt arcus gr. 9. 19. hoc dempto ab aſcenſione recta ☼, vt ſuprà grad. 157. 42. conſtituitur etiam ipſius obliqua gr. 148. 23.

Per ſinus fiat vt 100000. ad tangētem ſecundam anguli modo LMD 982. 13. ita tangens cruris DL gr. 922. & 16495. ad ſinum cruris ML 16200. cui competunt gr. 9. 19. quare, & ſemper obliqua ☼ aſcenſio gr. 148. 23.

Si ſtella cuius quęritur obliqua aſcenſio aliquam habeat latitudinem, quæratur ipſius declinatio cum latitudine per punctū 24. & proſequantur operationes, vt hic ſupra.

Rectam ſtellarum, & obliquam deſcenſionem inuenire.

PVNCTVM XXIX.

Recta ſtellæ deſcenſio eſt arcus æquatoris ab initio Arietis numeratis coincidens cum aliquo cœli puncto in recta ſphæra.

Deſcenſio recta inuenitur per rectam aſcenſionem, nam ſi recta aſcenſio non excedat ſemicirculum, ipſi additur ſemicirculus, & productum erit quæſita recta deſcenſio, vt ex. gratia inuenta fuit ſupra aſcenſio recta ☼ gr. 157.42. cui addito ſemicirculo, nempè gr. 180. nam non excedit ea recta aſcenſio ſemicirculum, fit deſcenſio recta ☼ gr. 337. 42. ſed ſi recta aſcenſio excedat ſemicirculum ab ipſa demetur ſemicirculus, & fiet quæſita recta deſcenſio.

Deſcenſiones obliquę habentur per obliquas aſcenſiones loci oppoſiti hoc pacto, quod ſi quęritur deſcenſio in primo ſemicirculo à ſumpta obliqua aſcenſione loci oppoſiti, ſubtrahitur ſemicirculus, & conſurgit deſcenſio, at in altero ſemicirculo ſumptę aſcenſioni loci oppoſiti addetur ſemicirculus.

Quęritur deſcenſio obliqua ſub polo gr. 44. 29. gr. 5. 54. ♍ oppoſiti loci gr. 5. 54. ♓ obliqua aſcenſio eſt gr. 347. 2. ablatis gr. 180. conſtituitur deſcenſio gr. 167. 2.

Aſcenſiones quaslibet per ſphæram cæleſtem demonſtrare.

PVNCTVM XXX.

Si velit aliquis per ſphæram demonſtrare rectam aſcenſionem alicuius loci in Zodiaco collocet polos mundi in horizonte, & in hoc etiam locum Zodiaci, & patebit gradus &c. æquatoris oriens cum ipſo, hoc eſt aſcenſio recta.

Quibus ſic ſtantibus in oppoſita parte, recta deſcenſio noſcetur, quę eſt gradus occidens cum propoſita Zodiaci portione.

Obliquæ deſcenſiones demonſtrabuntur, ſi ad datam poli ab horizonte eleuationem polus competens erigetur, & vt ſupra operationes continuabuntur.

E conuersò ex cognita qualibet aſcenſione ſciri poterit, quot Zodiaci gradus ipſi debeant conuenire.

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Arcum ſemidiurnum, & ſeminocturnum Solis, vel alterius ſtellæ cuiuſcunque cognoſcere.

PVNCTVM XXXI.

ARcus ſemidiurnus, & ſeminocturnus eſt dimidia quantitas temporis competens reuolutioni ſtellæ.

Per tabulas appoſitas extrahi poteſt arcus ſemidiurnus, aut ſeminocturnus Solis, facto ingreſſu in tabulam arcus ſemidiurni, aut ſeminocturni, factam ad eleuationem poli, pro qua quæritur talis arcus, cum cognito loco ☉, & patebit ſub ſigno ☉, & in directum graduum ipſius quęſitus arcus, qui ſemidiurnus erit, ſi ☉ ſit in prima Zodiaci medietate. Quod ſi ☉ ſit in altera medietate, debebit arcus ſemidiurnus inuentus ſubtrahi ab horis 12. & remanebit arcus, qui ſeminocturnus appellabitur, vt ex. gratia quæratur, poſito ☉ in gr 5. 54. ♍ arcus ipſius ſemidiurnus in altitudine poli gr. 44. 29. inuenta pro his tabula arcus ſemidiurni, quærendo in calce, vbi eſt ſignum ♍, & aſcendendo gr. *6.* ♍, habeo horas *6.* 37. quæſiti arcus ſemidiurni; hæque horæ *6.* 37. demptæ ab horis 12. relinquunt horas 5. 23. arcus ſeminocturni, poſito ☉ in gr. *6.* ♓, vbi opponuntur gr. *6.* ♍.

Trigonometricè Solis, alteriuſuè cuiuſcumque ſtellæ ſemidiurnus arcus, et ſeminocturnus inuenitur per aſcenſionalem differentiam; vt dictum eſt in puncto 15. ipſa enim inuenta, ſi locus ſtellæ, cuius hic arcus quæritur ſit in primis ſex ſignis eclipticæ, & differentia aſcenſionalis addatur gr. *90.* erit cognitus arcus ſemidiurnus, ac ſi ipſa dematur à grad. *90.* ſtante ſtella in vltimis ſex Zodiaci ſignis habebitur ſtellæ arcus ſeminocturnus, vt ex. gratia comprobetur arcus inuentus Sòlis in pũcto 28. inuenta eſt differentia aſcenſionalis loci ☉ g. *9.* 1*9.* quibus ſi addantur gr. *90.* ratione loci ☉, habebitur huius arcus ſemidiurnus gr. *99.* 1*9.* qui in horis per punctum 25. eſt h. *6.* 37.

Etiam inueniri poteſt hic arcus per punctum 28. ſupputando aſcenſionem obliquam ſtellę, & loci oppoſiti ipſi in Zodiaco, nam dempta aſcenſione veri loci ſtellæ ab aſcenſione loci oppoſiti, nota erit tota quantitas diurna reuolutionis ſtellæ, vnde ipſius dimidia erit quęſitus arcus ſtellæ in primo ſemicirculo Zodiaci ſemidiurnus.

In puncto 28. inuenta fuit obliqua ☉ aſcenſio gr. 148. 23. & ea loci oppoſiti gr. 347. 1. vnde quantitas diurnæ reuolutionis ☉ eſt grad. 1*9*8. 38. & arcus ſemidiurnus gr. *99.* 1*9*'.

Co-

Cognitoq; arcu ſemidiurno ſi dematur à gr. 180. remanebit arcus ſeminocturnus loci oppoſiti ſtellæ, vt hic ☉ gr. 5. 54. ♓.

Quodlibet datum tempus etiam ex diuerſis principijs numeratum reducere ad tempus poſt Meridiem, nempè in tempus Aſtronomicum.

PVNCTVM XXXII.

VT reducantur noſtræ horæ Italicæ in Aſtronomicas, quæ à Meridie incipiunt numerari, & nos Itali incipimus horas ab Occaſu toto Solis numerare, ſatis erit addere arcum ſemidiurnum, aut ſeminocturnum dato tempori, vt habeatur aſtronomicum, vt exempli gratia reducendum ſit in tempus Aſtronomicum, hoc anno 1688. Auguſti diebus 28. h. 17. min. 38. communis horologij.

In Ephemeridibus dicti anni, et diebus 28. Auguſti h abetur locus ☉ circa gr. 6. ♍ cuius arcus ſemidiurnus eſt h. 6. 37'. hoc tempus additum h. 17. min. 38. dat hor. 0.15. at demptis horis 24. remanet hora 0. cum min. 15. poſt Meridiem, et P. M. pro tempore aſtronimico diebus nempè 28. Auguſti h. 0. 15. P. M.

Vbi notandum, quod niſi fuiſſet talis exceſſus ſuprà horas 24. debuiſſet vna dies ſubtrahi à datis diebus, nam dies ciuilis cum Aſtronomica non concordaret, quia diem nos Itali incipimus ab Occaſu ☉, & incipiunt Aſtronomi à ſubſequenti meridie eamdem diem.

Etiàm vt verùm acquiratur aſtronomicum tempus debebit addi circiter vna hora media, ego autem addo min. 25. tempori aſtronomico, & ratio eſt quia non numeramus horarum principium à verò ☉ occaſu, vt deberet, at à toto ipſius occaſu, quando nempè lux diſperſa videtur, & inter hoc, & aliud tempus intercipitur ferè media hora, quare datum tempus verè in Aſtronomicum reductum erit diebus 28. hor. 2. minut. 15. P. M.

Si velit reduci tempus datum Babiloniorum, Perſarum, Syrorum, Damaſcenorum, Balearium, & Norimbergenſium, qui diem ineunt ab ortu ☉ in horas P.M, addatur ipſi nocturna quantitas, quæ habetur ſubtrahendo duplicatum arcum ſemidiurnum, vel ſeminocturnum ab horis 24, vel gr. 360. & eorum tempus erit reductum in Italiæ tempus, cui addendo etiam arcum ſemidiurnum, aut ſeminocturnum erunt horæ Aſtronomicæ.

Etiàm ſi in Aſtronomicum tempus cõmutandum ſit in illud Hiſpanorum,

rum,Gallorum,Belgarum,Anglorum, Luſitanorum,&c. inchoans à media nocte, dato tempori adiungentur horæ 12. & orietur tempus Aſtronomicum, quia à media nocte ad meridiem ſunt horæ 12.

Diſtantiam Stellæ à Meridiano, & rectam medij Cœli Aſcenſionem ſupputare.

PVNCTVM XXXIII.

DIſtantia Stellæ à meridiano eſt arcus æquatoris concluſus inter meridianum regionis, & circulum per polos mundi, & centrum ſtellæ tranſeuntem.

Si ſtellæ non mouerentur vtique à punctis immobilibus ſemper eaſdem haberent diſtantias, vt hic à meridiano dato immobili, ſed patet moueri motu æquatoris, vnde à meridiano eamdem ſemper non ſeruant diſtantiam ab æquatore commenſuratam, & hæc eſt quæ quęritur.

Pro quo notandum portionem ęquatoris meridianum percurrentem medij cœli, aut MC rectam appellari aſcenſionem, quam neceſſe eſt cognoſcere pro inuenienda quæſitâ diſtantia.

Vt hæc medij cœli aſcenſio recta cognoſcatur aliquo dato tempore ducto in Aſtronomicum niſi tale ſit, iueniatur per 26. aſcenſio recta ☼ cui addantur horæ PM conuerſæ in gradus æquatoris per 25., & productum erit quæſita aſcenſio recta MC, à qua ſubtrahentur gr. 360. ſi ſupra hos eceſſus ſit,& ſimiliter reliquum erit recta aſcenſio MC, vt ex. gratia. In 26. huius inuenta eſt aſcenſiio recta ☼ gr. 157. 42. his addantur gr. 10. competentes h. o. 40. P. M. & fiet aſcenſio recta MC, & meridianum percurrens gr. 167. 42'.

Hac cognita, & recta aſcenſione ſtellæ cuius quæritur à meridiano diſtantia ſubtrahatur minor à maiori, & differentia erit ſtellæ diſtantia à meridiano proximiori, vt exempli gratia. Nunc datur recta ☼ aſcenſio gr. 157. 42. & M. C. gr. 167. 42'. vnde differentia, & diſtantia ☼ à meridiano grad. 10. 0'. per quos habentur iuxtà punctum, 25. horæ o. 40'. P. M.

De

PVNCTVM XXXIV.

CIrculi domorum cęleſtium ſunt maximi circuli ſphęræ ducti per ſectiones commnnes meridiani, & horizontis, & diuidentes in duodecim partes æquales æquatorem, vnde conſtat illarum partium quælibet gr. 30. æquatoris, & hi circuli ſunt ſex, quorum duo principales ſunt meridianus, & horizon, ex quorum ad angulos rectos interſecatione duo quadrantes ſuprà terram conſtituuntur, & duo infrà ipſam.

Alij quatuor circuli propter interſecationem, quam habēt in ea meridiani, & horizontis, poſitionis appellabuntur, aut potius horizontes, etenim eſt ſtellæ circulus poſitionis ſuus horizon.

In hac figura meridianus intelligetur eſſe ABCD, horizon AC, & poſitionum circuli AIC, AKC, ALC, & AMC nam P, & Q facti ſunt poli, vnde medietas æquatoris BF, & Zodiaci HD, & ſupponitur BI, continere gr. 30. & BK gr. 60. & BR gr. 90. repreſentatq; figura medietatem cęli aſcendentem.

Ad ſciendum quantum polus P eleuetur ſuprà circulum poſitionis A I C, neceſſe erit à polo P demittere perpendiculum vt P S, nam eius quantitas ſignificabit quãtum polus eleuetur ſupra circulum poſitionis AIC; huius arcus centrum eſt, vbi eſt interſecatio æquatoris, & circuli poſitionis.

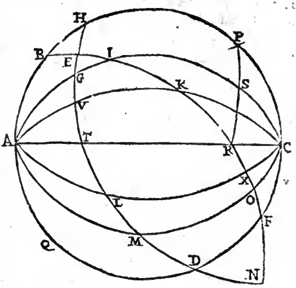
Huiuſce arcus quãtitas inueniri poteſt per angulum AIB, quem facit ęquator cum circulo poſitionis, nam cognito angulo AIB erit etiam huius ad verticem cognitus angulus RIS, & complementum vtrorumlibet iſtorum erit arcus PS, & ratio eſt quia ſi arcus PS, vſque ad æquatorem, vt in R producatur vtiq; fiet PR quadrans, nam à polo mundi ad ęquatorem interſunt ſemper gr. 90. quare ſi per cognitum angulum RIS noſcitur portio arcus RS erit, & reliquus arcus PS, cognitus, vt complementum ad gr. 90.

Eodem modo operabitur pro cæteris poſitionum circulis, & cognoſcetur altitudinem poli P ſupra poſitionis circulum AIC, æqualem eſſe depreſſioni alterius poli Q à circulo poſitionis AMC, & ſic de cæteris correſpondentibus.

Si cognita eſſet portio æquatoris conueniens ipſi B, & in B, cognoſceretur quæ pars æquatoris haberetur ab AIC, circulo poſitionis per additionem gr. 30, vt in I, & ſic per additionem gr. 60. quæ conueniret cir-

circulo AKC, addendo gr. 90. quæ percurreret R, gr. 120. quæ X, gr. 150. quæ O, & gr. 180, quæ competat ipſi F.

Vt exempli gratia accidat in puncto B pars æquatoris gr. 167. 42'. erit ergo intrà ſchema æquinoctium autumnale quare intelligetur, vt in E principio ♎, & Zodiaci interſectione cum æquatore, vnde & intelligitur N initium Zodiaci, & ♈; hoc poſito ſi ipſi B competit aſcenſio, quæ dicitur recta gr. 167. 42'. huic addendo gr. 30. fiet aſcenſio, quæ obliqua nuncupabitur competens circulo poſitionis



AIC gr. 197. 42'. addendo primæ gr. 60. vel huic gr. 30. fit obliqua aſcenſio circuli AKC gr. 227. 42'. & huic rurſus addendo gr. 30. ea horizontis ARC gr. 257. 42'. & ſic circuli ALC gr. 287. 42'. circuli AMC gr. 317. 42', & tandem ipſius AFC gr. 347. 42'. prætermiſſis gr. 360 (plures enim circulus non cõtinere ſupponitur) ſi in alio caſu fieret exceſſus ſuper eoſdem.

Et quia in E terminant grad. 180, nam ibi eſt diametralis oppoſitio à puncto, quo ſumit initium Zodiacus, & æquator, ſequetur, quod EB ſit gr. 12. 18'.

Pro Domo Decima.

HIs cognitis aſcenſionibus, poteſt ſupputari, quæ Zodiaci pars ſit congrua, tam rectæ aſcenſioni B, & obliquis IKRXO, nam pro primo inueniendo, in triangulo EBH rectangulo ad B, propter interſecationem meridiani, & æquatoris cognitum eſt crus EB, portio æquatoris inter æquinoctium, ♎ in quo terminantur gr. 180. & meridianum modo gr. 12. 18', datus eſt etiam angulus maximæ declinationis pro

nunc gr. 23. 30, quare haberi poterit hypothenuſa EH, portio Zodiaci, dato æquatori competens, addatur ergo logorithmus ſecundus maximæ declinationis, gr. 23. 30. qui eſt 996240. cum meſologorithmo ſecundo cruris cogniti EB, gr. 12. 18'. qui eſt 1066147. & fiet meſologorithmus ſecundus hypothenuſę EH, 1062387. quę eſt gr. 13. 22. ſubtrahendi à gr. 180. quare eſſent in meridiano gr. 16. 33'. ♍, aut gr. 166. 38. Zodiaci ab ♈ initio computati, & gr. 167. 42'. æquatoris ab eodem principio.

Et hic cum logorithmis ſolum exempla expedire licebit, ne forſitan additus labor incaſſus iudicaretur.

Pro Domo Vndecima.

PRo habendo arcu Zodiaci EG, competenti circulo poſitionis AIC prius neceſſe erit ſcire angulum BIA, quem facit ęquator cum AIC, circulo poſitionis, et hic quoque ſic poterit inueniri.

In triangulo BIA, ad B, rectangulo data ſunt duo crura BI, gr. 30, et AB, complementum altitudinis poli, aut ſupplemẽtum ad gr. 180. nam PC, eſt altitudo poli, PB, quadrans, et totus ABPC, eſt gr. 180. vnde addita altitudine poli gr. 90, et dempto producto gr. 180. remanebit BA, pro quo ſit PC, altitudo poli gr. 44. 29. cui adduntur gr. 90. et fiunt gr. 134. 29. qui dempti à gr. 180. dant AB, gr. 45. 31. quare addatur Moſologorithmus cruris BA, gr. 45. 31', et 1000783. cum ſecundo Tomologorithmo cruris BI, gr. 30. eſtque 1030103. et erit meſologorithmus 1030886. anguli BIA gr. 63. 51'. ex quo et noſcitur arcus PS, vt in ſuperioribus gr. 26. 9. tamquam complementum gr. 63. 51'. ad quadrantem.

Cognito angulo BIA, erunt nota tria in triangulo ſphęrico obliquangulo EIG, nempè baſis EI, per portionem ęquatoris gr. 17. 42'. exceſſum ſcilicet ad gr. 180. fuit enim ſupra inuenta aſcenſio obliqua circuli poſitionis AIC gr. 197. 42., nec non cognitus eſt angulus circuli dicti poſitionis, et ęquatoris inuentus gr. 63. 51', et angulus maximę declinationis, quare noſcetur EG, arcus Zodiaci ab inirio ♎ vſque ad circulum poſitionis AIC, vt ſequitur

Angu-

Angulus IEG, maximę declinat.	gr. 23. 30'.		
Angulus ęquat. & circ. poſit. AIL,	gr. 63. 51.		
Summa	gr. 87. 21.		
Differentia	gr. 40. 21.		
Semiſumma	gr. 43. 40. 30''.	T. 1014070.	T. 1016080.
Semidifferentia	gr. 20. 10. 30.	L. 997250.	L. 953768.
Semibaſis EI,	gr. 8. 51.	M. 919229.	M. 919229.
Semiſumma crurum EG, GI,	gr. 11. 25'. ex	M. 930549.	M. 889077.
Eorumdem ſemidifferentia	gr. 4. 27. ex		M. 889077.

Vnde crus maius EG, gr. 15. 52. videlicet gr. 15. 52'. ab initio ♎, & ſic dicto circulo poſitionis AIC, inſpiciuntur competere gr. 15. 52'. ♎, & pro Domo Vndecima.

Pro Domo Duodecima.

GRatiâ circuli poſitionis AKC, qui intelligitur eſſe circulus poſitionis Domus Duodecimæ, vt inueniatur EV, arcus Zodiaci, quæretur prius angulus AKB, dicti circuli poſitionis, & æquatoris, & ſupputabitur ſimiliter, vt ſupputatus fuit angulus BIA.

Crus B. A.	gr. 45. 31'.	M. 1000783.	
Crus B. K.	gr. 60. o.	T. 1006247.	
Angulus AKB,	gr. 49. 37. ex	M. 1006247.	hoc cognito.

In triangulo ſphęrico obliquangulo EVK, ex noto crure EK, gr. 47. 42'. angulo EKV, gr. 49. 37', & altero maximæ declinationis KEV, noſcetur crus Zodiaci EV, vt infrà.

Angulus KEV, maximę diclinat.	gr. 23. 30.				
Angulus EKV, circ. poſit. & ęquat.	gr. 49. 37.				
Summa	gr. 73. 7.				
Differentia	gr. 26. 7.				
Semiſumma	gr. 36. 33. 30''.	T.	1009515.	T.	1022502.
Semidifferentia	gr. 13. 3 30.	L.	998862.	L.	935400.
Semibaſis EK,	gr. 23. 51.	M.	964552.	M.	964552.
Semiſumma crurum EV, KV,	gr. 28. 12'. ex	M.	972929.	M.	922454.
Eorum ſemidifferentia	gr. 9. 31. ex			M.	922454.

Quare crus maius EV, gr. 37. 43. nempè integrum ſignum, & gr. 7. 43'. ab initio ♎, & ità pro domo duodecima gr. 7. 43'. ♏.

Pro Horoſcopo, aut Domo Prima.

SEd pro Horoſcopo, aut prima Domo non eſt neceſſe inuenire alium circuli poſitionis, aut Horizontis cùm Æquatore angulum, quoniã hic ſemper eſt æqualis altitudinis poli complemento B. A. & modo gr. 45. 31', quarè etiam per dicta ſuperiùs noto crure ER gr. 77. 42'; eodemque angulo maximæ declinationis habebitur, aſſumpto inſtanti, oriens portio Zodiaci ET, vt ex adiuncto calculo, & triangulo ETR.

Angulus RET maximę declin.	gr. 23. 30.				
Angulus ERT Horiz. & Æqu.	gr. 45. 31.				
Summa	gr. 69. 1.				
Differentia	gr. 22. 1.				
Semiſumma	gr. 34. 30. 30'	T.	1008404	T.	1024678.
Semidiffereutia	gr. 11. 0. 30.	L.	999193.	L.	928093.
Semibaſis ER.	gr. 38. 51.	M.	990604.	M.	990604.
Semiſſumma crurum ET, RT.	gr. 43. 49'. ex	M.	998201	M.	943375.
Eorumdem Semidifferentia	gr. 15. 11. ex			M.	943375.

Igitur crus maius ET gr. 59. 0. ſcilicèt integrum ſignum, & grad. 29. 0'. ab initio ♎, ſicque competent Domui primæ gr. 29. 0'. ♏.

Pro Domo Secunda.

VT ſupputetur arcus EL. pro parte Zodiaci competente circulo poſitionis ALC. domus ſecundæ, animaduertetur, quod angulus EXL eſt æqualis, proùt ad verticem, angulo FXC, qui æqualis eſt per 36. lib. 3. triangulorum Monteregij angulo BKA, quià crus AB, æquale eſt cruri FC; & crus BK, æquale cruri FX, & angulus ABI, æqualis angulo CFX, vnde per dicta fit baſis AK, æqualis baſi CX; vndè per 35. eiuſdem triangulorum Monteregij eſt angulus AKB, æqualis angulo FXC, quarè notus eſt angulus EXL, gr. 49. 37'; & ſic hoc angulo nòto in triangulo ſphærico obliquangulo EXL, angulo maximæ declinationis, & baſi EX, gr 107. 42'. inuenientur in L, percurrere grad. 26: 23'. ♐, vt infrà.

Sũma angulorũ EXL. & LEX.	gr. 73. 7'.		
Differentia	gr. 26. 7.		
Semiſumma	gr. 36. 33. 30'.	T. 1009515.	$\overset{2}{\text{T}}$. 1022502
Semidifferentia	gr. 13. 3. 30.	$\overset{2}{\text{L}}$. 998862.	L. 935400
Semibaſis EX.	gr. 53. 51.	M. 813635.	M. 1013635
Semiſumma crurũ EL. XL.	gr. 58. 56. ex	M. 1022012.	M. 971537
Semidifferentia	gr. 27. 27. ex		M. 971537

Et sìc maius crus EL gr. 86. 23. ab inito ♎, & pro Domo ſecũda gr. 26. 23. ♐.

Pro Domo Tertia.

DEniquè pro noſcendo arcu, Zodiaci EM, per eaſdem rationes, vt ſuprà de ſecunda Domo, notus eſt angulus EOM; crus EO grad. 137. 42', & angulus maximæ dæclinationis, vnde:

Sũma angulorum MEO, EOM.	gr. 87. 21'.
Differentia	gr. 40. 21.

Semi-

Semiſumma	gr. 43. 40. 30".	T 1014070 T 1016080
Semidifferentia	gr. 20. 10. 30.	L 997250 L 653768
Semibaſis EO	gr. 68. 51.	M 1041243 M 1041243
Semiſſumma crurum EM. OM.	gr. 73. 24'. ex	M 1052563 M 1011091
Semidifferentia	gr. 52. 14. ex	M 1011091

Ergò crus maius EM. gr. 125. 38. à principio ♎, & pro Domo tertia gr. 5. 38'. ♒.

Sed breuiùs, ac facilius inuenientur loca Zodiaci Domibus competentia per adiunctas Tabulas Domorum, vt dicetur in fine puncti huius.

Quibus ſolùm habitis Zodiaci partibus allatis poſitionum circulis conuenientibus, vt habeatur portio Zodiaci competens alijs ſex partibus eorumdem circulorum diametralibus, ſatis erit noſcere oppoſitum eclipticæ ſignum eo ſigno, quod inuentum eſt, eoque ijſdemq; gradibus, & horum fractionibus ſcietur pars oppoſita Zodiaci cõueniens diametrali parti dictorum circulorum Poſitionis; vt ex. gratia inueni ſupra competere meridiano partis ſuperioris gr. 16. 38. ♍; dico, quod meridiano partis inferioris conuenient gr. 16. 38. ♓, quod patet per rationem diametri, & in hoc caſu per rectangulum in F triangulum NFD; in quo eadem data ſunt, quæ in altero EBH, nempè crus NF gr. 12. 18'. & angulus maximæ declinationis, quare ND erit æqualis hypothenuſæ EH, & ſolum mutatur oppoſitum Zodiaci ſignum, vt ♊ in ♍. Facilimè oppoſita ſigna cognoſcuntur, ſi in duos æquales ordines, incipiendo ab ♈ diſponantur, ſic enim noſcetur ſignum primi ordinis opponi primo ſecundi, &c. vt hic.

♈	♉	♊	♋	♌	♍
♎	♏	♐	♑	♒	♓

Qua de re ſi inuenta ſunt ſupra, quę competunt ſex circulis dictis poſitionum ex Zodiaco, cętera ſex ſic erunt cognita.

Prima ſeu inuenta.			Vltima ſex ſic inuenta.		
	gr.			gr.	
♍	16	38'	♓	16	38'
♎	15	53	♈	15	53

♏

♏	7	43	Per	♉	7	43
♏	29	0	Signa oppoſita	♉	29	0
♐	26	24		♊	26	24
♒	5	38		♌	5	38

Per hæc ſequitur totum Cœlum diuiſum eſſe in duodecim partes æquales, diuiſum enim eſt per ſex circulos maiores, vt horizon eſt, meridianus, & quatuor alij appellati poſitionis, vnde ſcire ſpernendum non eſt, quod has duodecim partes appellant Aſtrologi domos, & manſiones cœleſtes, quę ſecundum ordinem ſignorum procedunt, nempè ab Oriente per Septemtrionem ad Occaſum.

Et quod exordium ſumitur à loco ortus, qui primę domus nomen habet; & continuatur numeratio ſecundum ſequelam ſignorum.

Eſt igitur vna domus cœleſtis duodecima pars cœli, quę nihilominus propter inęquales aſcenſiones, & ſignorum Zodiaci deſcenſiones non continet ęqualem graduum quantitatem, quoniam ſi aſcendat ſignum longę aſcenſionis, vna domus continet minores gradus, ac contineat quando aſcendit ſignum breuis aſcenſionis.

Continet tamen triginta gradus ęquinoctialis circuli, ſemper ęqualiter, nempè quinque ante cuſpidem, & 25. poſt cuſpidem domus.

Sed hę duodecim domus poſteà variè diuiſę ſunt, nam in reſpectu horizontis diuiſę fuerunt in domus hemiſpherij ſuperioris, vt ſunt 12. 11. 10. 9. 8. 7. & in domus hemiſpherij inferioris 6. 5. 4. 3. 2. 1. & ſic cum ſunt in his Planetę dicuntur eſſe ſub horizonte, aut ſub terra, vt in primis dicuntur ſupra horizontem, nempè ſuprà terram.

Et in reſpectu circuli Meridiani, in duas alias medietates diuiſerunt has domus, alteram vocauerunt Orientalem, aut aſcendentem, alteram Occidentalem, aut deſcendentem. Medietas, aut pars aſcendens continet tertiam, ſecundam, primam 12. 11. & decimam, et pars deſcendens continet, 9. 8. 7. 6. 5. et quartam.

Et denique mediante Meridiano, et horizonte diuiſerunt omnes dictas domus in quatuor partes æquales, quas vocauere quartas, aut cœli quadrantes, quarum quarta quęlibet tres domus æquales ab ęquatore menſuratas continet.

Prima quarta, aut quadrans cœli incipit à cuſpide orientis, aut primę domus, et terminat in cuſpidem medij cœli, aut decimę domus, et continet in ſe 12. 11. 10, et vocatur ab Aſtrologis quarta orientalis aſcendens, puerilis maſculina ſanguinea, & veris.

Secunda quarta incipit à cuſpide 10. & terminat in cuſpidem occiden-

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dentis, nempè in 7. & continet 9. 8. & 7. & dicitur ab Aſtrologis quarta meridionalis deſcendens, iuuenilis, fœminina, colerica, æſtiua.

Tertia quarta incipit à cuſpide 7. domus, & terminat in cuſpidem imi cœli, aut 4. & continet 6. 5. & 4. & nuncupatur 4. occidentalis, deſcendens, virilis, Maſculina, melancolica, & Autumnalis.

Vltima quarta incipit à cuſpide 4. domus, & terminat in cuſpide primæ, aut aſcendentis, & continet 3. ſecundam, & primam, & appellatur 4. Septemtrionalis aſcendens, ſenilis fœminina, & hyemalis.

Diuiſerunt Aſtrologi in indicatis modis totam Cœli machinam, quia obſeruauerunt Planetas, & ſydera in quibuſdam ipſius Cœli partibus producere effectus, non ſolum fortius, & in alijs partibus debilius, ſed in aliquibus velociores, & in aliquibus tardiores, immo etiam producere in vna parte effectus, quos non producebant in altera, nam poſiti Planetæ in qualibet partium Orientalium, veloces, & Occidentalium tardos producunt effectus, & rurſus in angulis citas, & celeres, in ſuccedentibus mediocri tempore, in cadentibus tempore tardo producunt effectus, in angulis validos, in ſuccedentibus mediocres, in cadentibus debiles effectus.

Ideoque notandum, quod nec anguli, nec ſuccedentes, nec cadentes inter ſe ipſas ſunt æqualis roboris, & potentiæ, nec æqualis debilitatis, ſed per dignitatem obſeruant, hanc ordine ſucceſſiuè, nempè prima 10. 11. 7. 6. 5. 2. 9. 3. 8. 6. & 12. nempè vna domus præfertur alteri, ſecundum hunc ordinem.

Et tandem Planetę poſiti in domibus maſculinis, eo magis maſculam habent naturam, vt etiam ſi in fœmininis fœmininam, & breuiter concludendum diuerſos producere effectus ſecundum domos, in quibus ſunt.

Prima domus ergo, vt duodecim deſcribamus domos, dicitur Oriens, ortus, aſcendens, horoſcopus, cardo, aut angulus orientalis, aut orientis, & dominatur capiti, & ab ipſa iudicium de bono vitę temperamento, ſecundum generalem ordinem de nutritione membrorum agitur, de valetudine, aut debilitate, & habitudine corporis, de illius inclinatione, atque omnibus accidentibus ętati primę euenientibus.

Secunda eſt ſuccedens, & lucrorum domus eſt, ſubſtantiarum, diuitiarum proprio ingenio acquiſitarum, & nuncupatur domus ſpei. Dominatur collo, & ceruici, & ab hac habetur coniectura omnium bonorum mobilium, facultatum, peculij, ſupellectilis, lucri, et gazarum, quę arte, labore, et induſtria, ſed non per hereditatem habentur.

Ter-

Tertia domus eſt cadens, et ſuperna propter bonos effectus, quos cauſat, et domus eſt fratrum, dominaturque humeris, brachijs, manibus, breuibus itineribus.

Quarta domus dicitur imum cœli, cardo, et angulus terrę, et fouea Planetarum, domus eſt Patrum, et Auorum aſcendentium, dominatur pectori, pulmoni, viſceribus, et linei, et ab ipſa habetur iudicium ſtatus Patris, et eius conditionis, patrimonij bonorum ſtabilium, ędificiorum, fundorum, hortorum, paſcuorum, vinearum, ſyluarum, aquarum, piſtrinorum, et huiuſmodi, theſaurorum, occultorum, et caſualium, foſſilium, minerarum metallicarum, et ſimilium.

Quinta domus dicta bona fortuna filiorum domus eſt, et voluptatum, dominatur ſtomacho, cordi, iecori, neruis, ilijs, dorſo, et ab ipſa habetur iudicium ſtatus, cõditionis, et fortunę filiorum: connotat etiam Legatos, Nuncios, Legationes, ſolatia, delectationes, pulchra quęq; veſtimenta, conuiuia, ludos, et omnia, quę poſſunt recreare animum; pariter demonſtrat dona, et munificentias, quę haberi poſſunt, aut à Principibus, aut à Cognatis, aut amicis, et magnis hominibus, aut propter gratitudinem, aut liberalitatem, vel declarationem beneuolentię, et amoris.

Sexta domus dicitur valetudinis, et malę fortunę, dominatur ventri inferiori cum inteſtinis, vſque ad podicem, et ab ipſa prius trahitur iudicium valetudinis, et ęgritudinum, et malorum corporis futurorum, et aliarum qualitatum malè infeſtantium corpus, et maximè viſum, et oculos: ſecundò habetur iudicium ſeruorum, et ſeruarum, et eorum ſtatus: tertiò de animalibus minoribus, et domeſticis, de vtilitate, et commodo, quod ab ipſis haberi poteſt.

Septima domus dicta Occaſus, et cardo, aut occidentis angulus, eſt domicilium connubij, dominatur partibus extra coxas, nempè lumbis, vmbilico, natibus apud locum ſedendi, ab ipſa nanciſcimur nuptiarum iudicium, & matrimoniorum; ſignificat quoq; contractus, emptiones, venditiones, mercaturas.

Octaua domus dicta ſuperna Porta, et piger locus, eſt domus mortis, & hęreditatum, præſidet vuluæ, veſicæ, teſticulis, & membro virili; Inducit difficultates vrinæ, calculos, & malum petroſum, hemoroides, & Teneſmum, nempè maximum deſiderium exonerandi, abſque poſſe, ventrem, dixi abſque poſſe, quoniam illam partem poteſt incurrere aliqua inflammatio, aut tumor in illa parte; ab ipſa habetur iudicium mortis, laborum, meſtitiæ nati, vt hæreditatum ex mortuis non cognatis,

 the-

theſaurorum occultorum, & pariter ſignificat metus, &c.

Nona domus, bona dicta, præſidet podici, natibus, & coxis, & ab ipſa extrahimus horum iudicium; connotat dignitates, artes, longas legationes, itinera longa, ſapientiam.

Decima domus regium eſt domicilium, culmen, faſtigium, cardo, angulus medij Cœli, atque Meridianus, dominatur genibus, & parti cauæ ipſis oppoſitæ, ab ipſa habetur iudicium Imperij, dominij, dignitatum ſæcularium, officiorum publicorum, magiſtratuum, opificiorum, quæ debet exſequi; eſt domus ſignificatrix matris, & ſubſtantiarum compilatarum.

Vndecima domus dicitur bonus genius, propter bonos euentus, quos ipſa ſignificat, eſt domus amicorum; dominatur cruribus, vſque ad pedum fixionem, & ab ipſa trahitur iudicium qualitatis Amicorum, fauoris, & eorum conditionis, & eorum, cum quibus ducere vitam concupiuit vitâ familiari, ſignificat pariter Regum conſiliarios, & Principum, &c.

Duodecima domus, dicta malus genius, à mala eius ſignificatione, eſt domus occultorum hoſtium, dominatur pedibus, & podagram explicat, ab ipſa trahitur iudiciũ triſtitiei, curarum, carcerũ, captiuitatum, beluarum, & animaliũ maiorum, ſubſtantiæ, & ſeruorum, & ſeruarum, aliquarum indiſpoſitionum, & ægritudinum nati, & animalium maiorum, & ab ipſa habetur coniectura accidentium, quæ ſuccedunt fœminis in partu.

Hæc de duodecim domibus generaliter dicta ſint, ſed cum quilibet non habeat efficax memoriæ munus, vt poſſit hęc omnia memorię mandare in duplici carmine, ab Aſtrologis eſſentiales domuum effectus enumerantur, vt

Vita, Lucrum, fratres, Genitor, nati, valetudo,
Vxor, mors, pietas, regnum, benefactaque, Carcer.

In quibus carminibus benè vides verba duodecim, quæ duodecim domibus attribuntur, primum enim primæ, ſecundum ſecundæ, & ſic in reliquis.

Dictæ domus duodecim ſuos habent conſignificatores illi enim dicuntur, qui taliter ſignificant, vt ea domus.

Vt primæ conſignificator eſt ♄, 2. ♃, 3. ♂, 4. ☉, 5. ♀, 6. ☿, 7. ☽. 8. ♄, 9. ♃, 10. ♂, vel ♃, 11. ☉, vel ♃, 12. ♄, vides enim hic quartæ domui pro conſignificatore datum eſſe Solem, Sol enim & ipſe ſit Patris conſignificator, & ità de alijs dicas, & adde, quòd ſicuti 3. domui aſſigna-

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gnatur ♂ pro conſignificatore fratrum maiorum,ità etiam in ipſa pro conſignificatore fratrum minorum aſſignatur ☿.

Quamobrem ſecundum ſignificationes dictarum domuum Planetæ, & ſydera varios producunt effectus ſecūdum eorum poſitionem in hac, vel illa domo; aut ſecundum dominium illorum, quod in hoc cardine, vel domo acquirunt, aut propter aſpectum illorum in hanc, vel eam domum, ex. gratia ſi ſit ♀ in prima, aut domina primæ, conſideratur pro diſpoſitione corporis; aut ſi aliquo modo reſpiciat decimā, conſideratur pro dignitatibus, pro actionibus, &c.; ſed ob meliorem captum notandū venit, quòd ille Planeta, qui maiores in ſigno domus acquirit dignitates dicitur dominus, aut diſpoſitor illius domus, ſicut etiā dicitur dominus ſignificatorum, nempe ☼ ☽ ⊙ Aſc. MC, dicitur inquam ille planeta, qui habebit plures dignitates in ſigno, et loco in quibus erunt tales ſignificatores.

Et quando plures Planetæ habent magnas dignitates in vno ſigno, vt ſunt ♄, & ♀ in ♎, ♃ ♀ in ♓, ☼, & ♂ in ♈, in tali caſu omnes illi Planetæ ernnt domini, aut diſpoſitores illius ſigni, & ſignificatorum.

Hiſce potius ad ſatisfactionem operis habitis accidit dicendum quod ſi velint inueniri partes Zodiaci competens domibus cœleſtibus, ex cognita aſcenſione recta, aut portione æquatoris meridianum percurrente, quæ recta meridiani, aut medij Cœli aſcenſio appellatur, & quidem abſque trigonometria, poterunt adhiberi appoſitæ tabulæ domorum cęleſtium, has enim intrando, cum recta medij cęli aſcēſione cōuerſa in horas &c. per punctum 26, niſi habeatur in horis, tales Zodiaci partes acquirentur quæſitis horis in fronte, minutis in latere, & pro ſecundis, ſi ſint, ahibita parte proportionali, vt ex. gratia. Eſt data vt ſuprà recta aſcenſio medij cęli gr. 167. 42'. 11, quæ in horis eſt h. 11. 10'. 49''. acceptis igitur hor. 11. in fronte, & min. 10. in latere ſub columna decimæ habentur gr. 16. 25. ♍, & ſub hor. 11. & min. 11. gr. 16. 41'. ♍, vnde eſt differentia min. 16. quorum pars proportionalis pro ſec. 49. eſt min. 13, vnde habentur gr. 16. 38'. ♍, vt ſuprà pro Domo Decima, pro Vndecima gr. 15. 53'. ♎, pro Duodecima gr. 7. 43'. ♏, pro Prima grad. 29. 0. ♏, pro Secunda grad. 26. 24. ♐, pro tertia grad. 5. 38. ♒ & ſic de alijs.

At hæ domorum tabulæ valent ſolùm, vbi polus eleuatur ſuprà horizontem gg. 44. 29'.

Cęteræ portiones æquatoris aſſignatos poſitionum circulos percurrentes, appellantur obliquæ aſcenſiones, & inueniuntur addendo ſem-

 per,

per, vt dicebatur ſuprá gr. 30. aſcenſioni rectæ medij cœli, vt fiat obliqua domus vndecimę, gr. 60. vt fiat obliqua duodecimę, gr. 90. vt fiat obliqua primæ, gr. 120. vt fiat ſecundæ, &c. ſubiungendo ſemper grad. 30. vſque in finem.

De portionibus Zodiaci competentibus cuicumque Domui cœleſti ad alias poli eleuationes.

PVNCTVM XXXV.

IN antecedenti capite præbuimus methodum reperiendi portiones Zodiaci competentes domibus cœleſtibus ad datum tempus, & in eleuatione poli gr. 44. 29'. addimus modò facilimam practicam, per quam eædem Zodiaci portiones inueniri poterunt etiàm ad quodlibet momentum, vbi figura cœleſtis erigenda erit, aut ad eleuationem poli grad. 38. ſiuè 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55.

Et præmittitur, quod ſi quis vellet trigonometricè figuras cœleſtes ſupputare, erit eadem ſemper methodus, quam in antecedenti capite expoſuimus, ſaluâ altitudinis poli variatione, ea enim ſemper conſideranda erit ad quam figura cœleſtis erigi debebit.

Sed quoniam vſus trigonometrię numerorum longam ſeriem inducit, ideò motus fui ſuperaddere nouas æquationum Domorum cœleſtium Tabulas, hoc eſt differentias Zodiaci aliarum ſupradictarum poli eleuationum ab eleuatione poli gr. 44. 29'; ijs enim per Aſcenſionem rectam medij cœli inuentis ſub Domo, ac eleuatione poli, de qua quæritur ęquatio, & applicatis iuxtà titulos additionis, vel ſubtractionis, de quibus in ijſdem Tabulis, figurę cœleſti conſtructę tamquam in eleuatione poli gr. 44. 29'. elicietur altera cęleſtis figura ad debitam poli eleuationem fabricata.

Faſque eſt hìc animaduertere, quod Domus Decima in quacumque poli eleuatione ſemper eſt eadem, ideoque nulla indiget ęquatione, cum per altitudinis poli quamlibet variationem Meridianum immutari ſit impoſſibile.

Exemplum: ſit erigenda cœleſtis figura in eleuatione poli gr. 38. die 18. Decembris anno 1693. hora 2. min. 29. ab occaſu pręcedenti ☉, & N. S. aut nocte ſequenti.

Hoc tempore per Ephemerides inuenietur ☉, in gr. 26. 24'. 7'. ♐

craſſo

craſſo tamen modo ſumptus, quod hic nihil officit, & per hunc locum ☉, ſcilicet cum gr. 27. tantùm ♐ in tabula arcus ſemidiurni, aut ſeminocturni conſtructa ad eleuationem poli gr. 38. inuenitur arcus hor. 7. 19'. ſub ♐, & in directum gr. 27, quę hor. 7. 19'. ſunt in hoc caſu ſubtrahendę ab horis 12. cum ♐ habeat titulum ſeminocturni, & ſic fit arcus ſemidiurnus ☉ hor. 4. 41'; qui additus dictis horis 2. 29'. ab Occaſu ☉ conſtituit hor. 7. 10'. P. M. diei 18. cum tempus ſuprà datum fuerit N. S.

Quarè per punctum 19. Anno 1693. Decembris hor. 7. 10'. P.M. diei 18. inuenietur ſupputatus ☉, in gr. 27. 42. ♐, & per punctum 26. in hac parte Zodiaci habere Aſcenſionem rectam hor. 17. 50; his addantur inuentę ſuprà hor. 7. 10. P. M, & erit Aſcenſio recta medij cœli hor. 1. 0.; ex additione namquè proueniunt hor. 25.; & ab his detrahendę ſunt hor. 24.

Cum hac Aſcenſione recta medij cœli hor. 7. 6. quęſitâ per Tabulas Domorum iuxtà punctum antecedens inueniuntur competere domibus —

Decimę	gr.	16.	17'.	♈
Vndecimę	gr.	27.	22.	♉
Duodecimę	gr.	6.	1.	♋
Primę	gr.	3.	5.	♌
Secundę	gr.	24.	23.	♌
Tertię	gr.	16.	32.	♍

Sed quoniam verè loca Zodiaci ità ſe haberent in altitudine poli gr. 44. 29'; ſed non in altitudine poli grad. 38, ideò per eamdem ſupradictam rectam Aſcenſionem medij cœli hor. 1. 0'. inuenientur æquationes pro qualibet domorum, exceptâ Domo decima, quæ nullâ indiget æquatione, animaduertendo eas ſemper ſumere propriè, ideſt pro Domo Vndecima æquationes Domus Vndecimæ, non autem Duodecimę, vel alterius Domus, et causâ huius addidimus titulos Aſcenſionis rectæ pro Domo Vndecima, pro Duodecima, pro prima &c.

Igitur cum dicta Aſcenſione recta inueniuntur ęquationes.

Sub Polo 38. (Pro Domo Vndecima gr. 2. 13'. cũ titulo ſuprâ ſubtrahe.
(Pro Domo Duodecim. gr. 4. 10. cum eodem titulo
((Pro Domo Prima gr. 3. 27.)
(Pro Domo Secunda gr. 2. 3.) Omnes ſubtrahendæ
(Pro Domo Tertia gr. o. 30.)

Quamobrem hæ æquationes omnes ſubtrahantur à locis Zodiaci ſuprà

prà inuentis in altitudine poli gr.44. 29'; & fient veræ Zodiaci portiones competentes in altitudine poli gr.38; & domibus cœleſtibus in altitudine poli gr. 38. collocandæ ad ſuprà etiam datum momentum, vt infrà

	Decimæ	gr. 16.	17'.		♈
	Vndecimæ	gr. 25.	9.		♉
	Duodecimæ	gr. 1.	51.		♋
Horoſcopi, ſeù	Primæ	gr. 29.	38.		♋
	Secundæ	gr. 22.	20.		♌
	Tertiæ	gr. 16.	2.		♍

Et ſic in alijs, vtendo ijſdem æquationum Domorum Tabulis, ſupputatis ad maiorem facilitatem, Operiſque breuitatem ad ſupra enumeratas polorum eleuationes, & principaliores, ſemperque exactè habebitur erecta cœleſtis figura ſecundum verum modum, ab Aſtronomis appellatum rationalem.

In fine noſcendum eſt, quòd etiam in his Tabulis æquationum adhibenda eſt pars proportionalis, vbi neceſſaria erit, non enim ad ſingula minuta rectarum Aſcenſionum medij cęli extendere dictas æquationes oportuit.

Hæcque pars proportionalis ſumetur, vel per auream regulam, aut per tabulam ſexagenariam dimidiando ſemper quantitatem, pro qua ſumenda eſt pars proportionalis, & quærendo differentiam in fronte, patebitque in area quæſita pars proportionalis. Exempli cauſa ſit quærenda æquatio horoſcopi ad altitudinem poli gr. 39. cum Aſcenſione recta medij cœli hor. 18. min. 45. 49''.

Æquatio pro	h. 18.	m. 44.	gr. 2.	17'.		
Æquatio pro	h. 18.	m. 46.	gr. 2.	22.		
Differentiæ	h. 0.	m. 2.	gr. 0.	5.		

Igitur ſi duo minuta dant min. 5. quid min. 1.49''. ? & factâ more ſolito reductione in ſecundas: ſi ſecundæ 120. dant min. 5. quid ſecundæ 109'' ? habebitur quæſita pars proportionalis min.4. 32''. 30'''.

Sed per tabulam ſexagenariam dimidiandæ ſunt ſec. 109. aut min. 1. 49'', & remanent 54'', 30'''. cùm quibus in tabula ſexagenaria in latere, aut in fronte, & ſuprà inuenta differentia min. 5. habetur primò pro 54''. & 5'. pars proportionalis m. 4. 30''. deinde pro reliquis 30''. ſecundæ 2. 30'''. & ſic ſemper quæſita pars proportionalis min. 4. 32''. 30'''. addenda Æquationi min. 44; quià hic creſcunt æquationes, alias minuẽda eſſet ſi defficerent, & elicietur pro Horoſcopo ad altitudinem poli

poli gr. 39; & Aſcenſione recta medij cœli hor. 18.45'. 59'. vera æquatio gr. 2. 21'. 32'''. 30''; ſed neglectis tantis minutijs gr. 2. 22. ſumptis alijs excedentibus dimidiam minuti quantitatem, vt moris eſt, pro integro minuto.

Et animaduertendum has Domorum Æquationes pro Aſcenſionibus rectis medij cęli poſitis in ſummitate Tabularum earumdem Æquationum Domorum ſemper eſſe ſubtractiuas ante poli eleuationem gr. 44. m. 29, atque ſemper eſſe additiuas poſt ipſam poli eleuationem gr. 44. m. 29. Ideſt ſi poli eleuatio pro qua quęritur Domorum Æquatio ſit maior altitudine poli gr. 44. m. 29, ęquationes ſunt ſemper additiuæ: ſi verò minor, ſemper erunt ſubtractiuæ.

Si autem agatur de Aſcenſionibus rectis medij cęli poſitis in calce ipſarum Tabularum æquationum domorum, fiet è contrà; nimirum ſi eleuatio poli pro quà quæritur æquatio domorum ſit minor altitudine poli gr. 44. m. 29. eędem domorum ęquationes ſemper erunt additiuæ: ſi veró erit maior ipſa altitudine poli gr. 44. m. 29, ipſæ æquationes ſemper erunt ſubtractiuæ.

Hæcque libenter addidimus in gratiam Nobilis Viri, ac Equitis Ariminenſis D. Caroli Antonij Battaglini, Virtutum omnium, atquè Aſtronomicarum amatoris diligentiſſimi, diſplicuitque hoc vnum tantùm, quod exiguus, in ſupputandis hiſce Domorum cęleſtium ęquationibus, labor fuerit, maiora namq; meritis eiuſdem ſpectatiſſimis in omne ęuum debuiſſe fatebimur.

De Circulis Poſitionis in Altitudine poli gr. 44. 29'.

PVNCTVM XXXVI.

EX dictis antecedenter patere poteſt quid eſt circuli poſitionis, nempe, quod ſit maximus circulus tranſiens per communes ſectiones horizontis, & meridiani, & centrum Stellę.

Diciturque ab Aliquibus horizon ſtellę.

In figura ABCD eſt meridianus, AE horizon, AHE circulus poſitionis ſtellę in H diſtantis ab Æquatore BC per HF ipſius declinationē verſus polum D; vt cognoſcatur quantum polus D eleuatus ſit ſuprà circulum poſitionis AHE, ſuprà hunc à D demittatur perpendiculum DG, nam huius quantitas quæſitę eleuationi poli ſuprà circulum poſitionis ſatisfaciet.

Pro

Per appoſitas tabulas ſi nota ſit altitudo poli gr. 44. 29'. facilis inuenitur ea quantitas perpendiculi DG menſurantis altitudinem poli D ſuprà circulum quemlibet poſitionis, ſi pariter nota ſit declinatio ſtellę, cuius circulus poſitionis,& ipſius à Meridiano diſtantia in horas, & harum fractiones,

Si noſcetur an tale punctum Cœli, aut ſtella ſit ſupra terram, vel ſub terra,

Atque ſi cognita erit denominatio declinationis, an ſcilicet ſi Meridiana, vel Septemtrionalis.

Ad comprobationem quęrendus etiam ſit circulus Poſitionis ☼ in ♎ gr. 5. 54. ♍ cuius cognita eſt declinatio gr. 9. 22. & quidem Septemtrionalis, vt potè in primis ſex Eclipticę ſignis, nota eſt altitudo poli gr. 44. 29. & diſtantia à Meridiano hor. o. min. 40. pro gr. 10. o. ſupra, eſtque Sol ſuprà terram, nam eſt ipſius ſignum in hemiſphęrio ſuperiori, quod conſtat prima, duodecima, vndecima, decima, nona, octaua, et ſeptima, ſi cęteris conſtat hemiſphęrium inferius.

Hiſce cognitis adeunda eſt tabula Poſitionum, cuius in latere inuenta quæritur declinatio ſtellæ ſecundum titulos, & ſuas denominationes, & in directum huius declinationis quæretur diſtantia à Meridiano, quibus inuentis,in fronte patebit quęſitus poſitionis circulus adhibitis partibus proportionalibus, vbi neceſſe erit.

Igitur, cum gr. 9. 22. Septemtrionalis declinationis ſuprà terram, & hor. o. 40. diſtantiæ à Meridiano inuentæ facto ingreſſu ta bulam circulorum Poſitionis patebit in directum gr. 9. proximè minor diſtantia dicta hor. o. 38'. o'. & proximè maior hor. o. 42'. 52''. ex quo noſcitur, quod circulus quęſitus Poſitionis intercipitur inter gradus 8. & 9. in fronte collocatos, quare adhibitis partibus proportionalibus pro præciſa declinatione, & iuſta à Meridiano diſtantia, inuenitur poſitionis circulus gr. 8. 22'. vt eſt perpendiculum DG, & ſuprà fuit inuentum.

Notandum, quod crus DH minus eſt quadrante, cum declinatio ferat poli D denominationem: æquale quadranti, cum nulla fuerit declinatio : & maius quadrante, cum declinatio habuerit denominationem diuerſam à polo D.

Suntque in noſtro caſu ſolùm imaginabiles tot circuli Poſitionum, quot poſſunt concipi inter gr. 44. 29'. altitudinis datæ poli, quià eſſe tantùm poſſunt tot circuli poſitionum, quot partes datæ eleuationis poli.

De circulis Poſitionis ab eleuatione poli gr. 37. vſquè ad grad. 56. excluſiuè.

PVNCTVM XXXVII.

TRigonometricè poſſunt inueniri quicumque circuli poſitionis ad quamcumque poli Altitudinem per regulas in antecedenti puncto demonſtratas, aut alia forma ſequenti.

Sit quærendus ex. gratia circulus poſitionis ☼ conſtituti in quinta Domo, cum gr. 27. 40. ♐, & cuius diſtantia à Meridiano MC. eſt hor. 7. 10; aut gr. 107. 30. in eleuatione poli gr. 38, vnde Diſtantia ab IC, h. 4. 50; ſeu gr. 72. 30. Igitur.

Diſtantia ☼ ab Imo Cœli	gr. 72. 30.		
Complementum poli gr. 38.	gr. 52. 0.		
Declinatio ☼, in gr. 27. 40. ♐	gr. 23. 29.		
Summa	gr. 75. 29.	R. L.	001409
Differentia	gr. 28. 31.	L.	967890
Semidiſtantia ☼ ab Imo Cœli	gr. 36. 15.	M.	986524
Arcus addittiuus d. Semidiſt.	gr. 19. 53.	ex M.	955823
Vndè arcus poſit. ab Imo Cęli	gr. 56. 8.	L.	991925
Altitudo Poli figuræ	gr. 38. 0.	M.	989281

Quæſitus ☼ circulus poſitionis gr. 32. 58'. ex M. 981206

Sed per noſtras adiunctas Tabulas poterit ſolùm inueniri circulus poſitionis quilibet ab altitudine poli gr. 37. ad gr. 56. excluſiuè, & ſic facilè inuenietur.

Conſiderabitur primò in qua Domo ſit Stella, cuius quæritur circulus poſitionis, & rigoroſè abſque aliqua graduum limitatione, ſicque non per dogmata Aſtrologica, quæ docent Stellam ſecundum ordinem non plus diſtantem à ſequenti Domo quãtitate quinque graduum, eſſe in ſequenti Domo, & non in ea domo, in qua verè reperitur: proindè ſuprà in exemplo diximus ☼ eſſe in quinta domo, aut intelligas inter quintam, ac ſextam Domum.

Secundò eiuſdem Stellæ ſumetur diſtantia à medio, vel Imo cœli ſecundum quod illi, aut huic proximior erit.

Ter-

Tertiò accipietur declinatio, ſeu cum latitudine, aut ſine prout ab antecedenti puncto 24. iuxtà quod velis admittere latitudinem, aut non, prout ex ſequentibus.

Quartò noſcetur circulus poſitionis Domus cui proximior eſt Stella, cuius quæritur circulus poſitionis per tabellam ſequentem, ex qua ingreſſu facto cum altitudine poli cœleſtis figuræ, facilè elicies in directum eiuſdem gr. & min. circulorum Poſitionis Domorum Vndecimæ, Duodecimæ, Secundæ, Tertiæ, & oppoſitarum.



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Tabula Circulorum poſitionis Domorum Cœleſtium.

Altitudines poli Cœleſtis Figuræ.	Circuli Poſitionis Domus Vndecimæ Tertiæ		Circuli Poſitionis Domus duodecimę Secundæ	
Grad	0	1	0	1
38	21	20	34	5
39	22	2	35	2
40	22	45	36	0
41	23	29	36	58
42	24	14	37	57
43	25	0	38	56
44	25	47	39	55
45	26	35	40	54
46	27	22	41	53
47	28	11	42	53
48	29	2	43	53
49	29	54	44	54
50	30	47	45	55
51	31	41	45	56
52	32	37	47	57
53	33	34	48	59
54	34	32	50	1
55	35	32	51	3
Oppoſitæ.	Domus Quintæ Nonæ.		Domus Sextæ Octauæ	

Ampliatio huius Tabellę pro erectionę Cœleſtis Figuræ de qua in puncto 34.
Subtrahe hos gradus, & minuta Circuli poſitionis Domus Cœleſtis à Quadrante, ſcilicet grad. 90. & habebis angulum Æquatoris, & Circuli Poſitionis Domus.

Quintò adeunda erit Tabula poſitionum generalis quærendo in frõte eiuſdem altitudinem poli figuræ, & in latere ſuprà cognitum circulum Poſitionis Domus proximioris Stellæ, cuius quæritur circulus Poſitionis, nam à realiter habebitur arcus æquatoris adnotandus.

Sextò per inuentam ſuprà Stellæ declinationem inuenientur differẽtiæ Aſcenſionales in earumdem Tabula, & primò in Circulo Poſitionis Domus, quæ habet viciniorem Stellam cuius quæritur circulus poſitionis, & ſucceſſiuè donec, & vſquequò per additionem differentiæ aſcenſionalis prædictis arcubus æquatoris adnotatis habeatur numerus ęqualis, vel numeri proximiores (ſi velis ſtellę circulum poſitionis etiam in minutis) diſtantię ſuprà inuentę Stellę à Meridiano, nam ille arcus æquatoris adnotatus, & cui fuit addita differẽtia aſcenſionalis, tamquam proximior diſtantię Stęllę à Meridiano, lateraliter exhibebit quęſitum circulum poſitionis, & per duos arcus ęquatoris proximiores eidem diſtantię, facta, more ſolito, parte proportionali cognoſcentur quoque minuta eiuſdem circuli Poſitionis: Vt ex. gratia.

Quærendus etiam ſit per noſtras haſce Tabulas circulus poſitionis ☼, in ſuprà adducto exemplo trigonometricè inuentus gr. 32. 58'. erit forma calculi, vt infrà.

Aſcenſio recta Imi cœli	h. 13. ò.	Subtrahe
Aſcenſio recta ☼.	h. 17. 50.	
Diſtantia ☼ ab Imo cœli	h. 4. 50.	
Declinatio ☼.	gr. 23. 29.	
Altitudo poli cœleſtis figurę	gr. 38.	

Quarè per antecedentem tabellam inuenitur: cùm ☼ ſit proximior ſextę Domui, cum gr. 38. altitudinis poli figurę Circulus poſitionis Domus ſextę gr. 34. 5.

Sed omiſſis minutis, ſumptiſque tantum gr. 34. quęrantur hi gr. 34. in fronte Tabulę generalis circulorum Poſitionis, ſumptis in latere eiuſdem gr. 38. altitudinis poli, & inuenies in directum gr. 34, et ſub gr. 38. arcum ęquatoris adnotandum h. 3. 58'. 48".

Huic adde differẽtiam Aſcenſionalem ☼ inuentam per eius declinationem h. 1. 8'. 12'; & in eleuatione poli gr. 34. qui fuit circulus poſitionis Domus ſextæ proximioris, & prædictus arcus æquatoris adnotatus redd etur æquatus h. 5. 7'. ò', ſed quoniam hæ h. 5. 7'. ò'. exuberant à ſupra inuenta ☼ diſtantia à Meridiano h. 4. 5ò. ideò ſignum eſt gr. 34. non poſſ e eſſe circulum poſitionis ☼ retrocedendo ergò quoniam habes exceſ-

ceſſum recurre ad grad. 33.

Arcus æquatoris adnotandus pro	gr. 33.	h. 3.	44'.	52''.		
Differentia Aſcenſionalis ✻ cum polo	gr. 33.	h. 1.	7.	36.		
Vnde arcus æquatoris æquatus pro	gr. 33.	h. 4.	50.	28.		

Et quoniam hic arcus ęquatoris ęquatus eſt h. 4. 50̀. 28''.; quę ſunt ſatis proximę diſtantię ✻ ab Imo cœli h. 4. 50̀.; ideò gr. 33. erunt verus circulus poſitionis ✻ quęſitus.

Sed ſi velles circulum poſitionis ✻ etiam in minutis, recurre denuò ad gr. 32.; quia arcus ęquatoris ęquatus pro gr. 33. excedit diſtantiam ✻ ab Imo cœli ſec. 28.; alias enim tibi recurrendum eſſet ad numerum maiorem.

Igitur arcus ęquatoris adnotandus pro	gr. 32.	h. 3.	32'.	28''.	Adde
Differentia Aſcenſionalis ✻ cum polo	gr. 32.	h. 1.	3.	4.	
Vndè arcus ęquatoris ęquatus pro	gr. 32.	h. 4.	35.	32.	B Subtrahe
Iuſuper arcus ęquatoris ęquatus ſuprà pro	gr. 33.	h. 4.	50.	28.	
Integra differentia		h. 0.	14.	56.	C
Etiam ſuprà inuenta diſtantia ✻ ab Imo Cœli		h. 4.	50.		
Subtraendo B. à C. pars differentię		h. 0.	14.	28.	

Quare ſi integrę differentię m. 14. 56''., ſeu ſec. 896. competunt min. 60. quę horum parti differentię min. 14. 28''. ſeu ſec. 868.? & per regulam trium inueniuntur min. 58.; erit ergo quæſitus ✻ circulus poſitionis gr. 32. min. 58.; vt etiàm ſuprà trigonometricè fuit inuentus.

Ex quibus collige, quod ſi Stella ſit exactè in aliqua domorum cęleſtium non eſſe tibi alium quęrere eiuſdem circulum poſitionis, quià eo caſu quantus erit per antecedentem tabellam circulus poſitionis Domus, tantus quoque erit Stellę circulus poſitionis.

Nec te capita tot terreant, pro inueniendo hac methodo, circulum poſitionis, ea enim optimè conſiderata, facillima, ſunt, & maximè, quia non important neceſſitatem ſubtilis operationis procedendo namquè etiàm partibus abſq; proportionalibus, quæ videntur negotio huic inferre laborem, exule errore, circulus poſitionis verus habebitur: exemplum minutè appoſuimus amatoribus ſubtilitatis, quæ tamèn omiſſa in hac circulorum poſitionis materia nihil præiudicare poteſt.

Eoque libenter methodum hanc inueniendi circulum poſitionis ſubiun-

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iunximus, quoniam eiſdem Tabulis, nempè Circulorum poſitionis generalis, ac Differentiarum Aſcenſionalium, poterit vnuſquiſq; ad eleuationem poli ſuæ Ciuitatis, aut loci conſtruere tabulam particularem pro inueniendis circulis poſitionis ſecundum formam, quam ſuprà pręſcripſimus pro inueniẽdo circulo poſitionis in altitudine poli gr. 44. 29' & methodus eſt ea, quę ſequitur: Conditurus igitur tabulam circulorum poſitionis pro tuo loco particularem:

Primò ſcribe ſiniſtram verſus duos ordines declinationum, quorum primus erit declinationis Septemtrionalis, incipiens à gr. 32. aut à quibuslibet alijs maioribus gradibus declinationis; ſed gr. 32. optimè ſeruiunt quibuſcunque Planetis, etiàm latitudinem gr. 8. cum dimidio ferentibus: & ſic deſinens in o. Ordo ſecundus erit declinationis Meridianæ incipiens ab vno gradu, & terminans ad gr. 32, aut maiores ad libitum, ſed in hoc caſu eſſent tibi aliæ differentiæ Aſcenſionales inueniẽdæ per punctum 28.

Secundo in fronte conſtruendę Tabulæ ſcribe numeros eleuationum poli ab vno gradu quidem initium ſumentes, & in latitudinem poli loci tui deſinentes.

Tertio intrà Tabulam generalem cum eleuatione poli gradus vnius, ac ex directo eius, & ſub gradibus eleuatione poli loci tui offendes arcum quemdam Æquatoris, quem addes ſingulis numeris in Tabula differentiarum Aſcenſionaliũ repertis ſub eleuatione poli vnius gradus incipiendo iuxta 32. aut maiores gradus declinationis, & aggregata hujuſmodi per ordinem ſcribe in area Tabulæ contexendæ ſub eleuatione poli vnius gradus, in fine autem huius poli vnius ſcribe prædictum arcum æquatoris abſque aliqua additione differentiæ Aſcenſionalis, nulli namque declinationi aliqua non competit differentia Aſcenſionalis, & huiuſmodi in alijs gradibus eleuatione poli loci tui, vndè primum ordinem ſeptemtrionalem terminatum habebis.

Quarto ab Arcu prędicto Æquatoris ſubtrahe ſingulas eaſdem differentias Aſcenſionales incipiendo iuxtà declinationem vnius gradus, & reſſidua ſcribe iterum in alia area Tabulæ exarandæ ſub eleuatione poli vnius gradus, & cæterorum vt ſupra, habebiſque perfectum quoquè ordinem Meridionalem, ac totam Tabulam: pro exemplo habes integram Tabulam poſitionum, ac directionum, quam conſtruximus ad eleuationem poli gr. 44. min. 29. infrà inter Tabulas collocatam.

Pro noſcendo trigonometricè arcu prædicto Æquatoris, qui intercipitur à Meridiano, & circulis Poſitionum, in ſchemate præcedentis puncti

ƈti 36. conſideratur ſphæricum triangulum rectangulum DEG, in quo nota eſt altitudo poli DE hypothenuſa, & crus DG per circulum poſitionis, cuius quæritur arcus dictus ęquatoris, quamobrem inueniri poterit angulus EDG; cuius menſura eſt idem arcus Æquatoris.

Quæratur hic Arcus ęquatoris pro circulo poſitionis gr. 27. in Altitudine poli gr. 44. 29'.

Hypothenuſa DE	gr. 44. 29'.	M. 2.	1000783.
Crus DG	gr. 27. 0.	M.	970717.
Angulus EDG	gr. 31. 15. ex L.		971500.

Qui conuerſus proportione horarum dat. h. 2. 5. 0''. apponendas in tabula particulari pro inueniendis circulis poſitionis ſub 27. ſi velis vti eis prout nos fecimus, quià aliàs etiàm eiſdem gr. 31. 15. & ſimilibus valebis conſtruere.

Tempus ortus, Meridiei Stellarum, & rurſus earum diſtantiam à Meridiano manifeſtare.

PVNCTVM XXXVIII.

QVęratur arcus ſemidiurnus, aut ſeminocturnus, per punctum 31. loci ſtellę in Zodiaco, & ſubtrahatur, ab horis 24. & remanebit tempus, quo Stella Meridianum percurreret; rurſus a tempore inuento ſubtrahatur idem arcus, & noſcetur tempus ortus ſtellę.

His inuentis, ſi tempori Meridiei inuento addantur horę 12. fient tempora, quę connotabunt Stellam Septemtrionis, & medię noctis punctum percurrere, quęrantur hęc in Sole conſtituto in principio ♋ ad polum gr. 44. 29'.

Arcus ſemidiurnus ☼ eo loco eſt h. 7. 41., qui demptus ab horis 24. dat tempus Meridiei ☼ eo loco h. 16. 19. rurſus ab hoc demantur h. 7. 41'. & fiet tempus ortus h. 8. 38.

Etiàm tempori Meridiei h. 16. 19. adiungantur horę 12. & fiet tempus, quo ☼ erit in puncto medię noctis demptis horis 24. h. 4. 19.

Cognito tempore Meridiei, ſi datum ſit aliquod tempus horologi communis, & quęrenda ſit diſtantia dati temporis à Meridie duorum temporum Meridiei, & dati, minus à maiori ſubtrahatur, & remanebit diſtantia à Meridiano dato tempore, & hęc, ſi neceſſe ſit, poterit conuerti in gradus ęquinoctiales per punctum 25. vt ex. gratia.

Quæ-

Quęrenda ſit diſtantia horę, 9. à Meridie, cum ☉ eſt in initio ♋, & quià ea tempeſtate inuentum eſt eſſe Meridiem horis 16.19., ab hoc demantur horę 9. & remanebunt horę 7. 19. diſtantię à Meridie, quę in gradus ęquinoctiales ſunt gr. 109. 45'.

Cognitis Stellæ circulo poſitionis, declinatione, & altitudine poli, ipſius à Meridiano diſtantiam habere.

PVNCTVM XXXIX.

IN figura antecedenti patet, quòd, his cognitis, ſunt in triangulo EDG, rectangulo ad G nota duo ſcilicet hypothenuſa DE altitudinis poli, & crns DG ex circulo poſitionis, quare poterit inueniri angulus EDG. ſimiliter in triangulo, & pariter rętangulo HGD, ex hypothenuſa HD, & crure DG, poteſt noſci angulus HDG, quo noto patere poteſt ex his totus angulus HDE, diſtantia ſtellę ab Imo Cœli, & complementum ipſius diſtantia à Meridiano.

Altitudinem ſtellæ cuiuſuis computare ſuprà Horizontem, & conſequenter diſtantiam à vertice.

PVNCTVM XXXX.

VT ſuprà dictum eſt in puncto 22. angulis verticalium circulorum cognoſcuntur ſtellarum altitudines, & à vertice dſtantię, nam ſi cognita ſit altitudo, & dematur à quadrante, remanens ſit ſtellę diſtantia à vertice, & pariformiter ſi menſurata ſit ſtellæ diſtantia à vertice in producto altitudo numerabitur.

In appoſito ſchemate in quo AFDC, ſit Meridianus, AE horizon, & & ſtella in S ſupponitur verſus polum boreum D, ducatur per C Zenith, & A centrum ſtellę S, circulus verticalis XSC, nam in hoc cognito arcu XS, altitudine ſtellæ ſuprà horizontem etiam per reſſiduum ad grad. 90. notus erit SC, & è contrariò, at ſi altitudo, aut ſtellę à vertice diſtantia ſciri velit, conſideretur ſphęricum triangulum obliquangulum CSD, ac ſi datus erit locus ſtellæ in Zodiaco, etiam data erit illius declinatio per 24. huius, vt PS, nam BF ponitur pro Æquatore, ſed PD, eſt quadrans, ergo SD erit complemẽtum declinationis ſtellæ, & per id notum erit crus SD. Etiam DE repręſentat altitudinem poli loci, quare

re noſcetur etiam CD complementum altitudinis poli, quià ſit Zenith in C, & à C ad E eſt quadrans, & in triangulo CSD erunt nota duo crura CD, & DS, vnde etiam ſi cognoſcatur angulus CDS diſtantiæ Stellæ in S à Meridiano, poterit ſupputari baſis C S diſtantia ſtellæ à C vertice, & proinde cognoſci SX, altitudo ſtellæ.

Detur itaque quærenda diſtantia centri ☉ à vertice, cum eſt initio ♋ hora 9. ad eleuationem poli gr. 44. 29., vnde in triangulo CSD notum eſt crus SD gr. 66. 30. DC gr. 45. 31. & comprehenſus angulus CDS per punctum penultimũ gr. 109. 45., vnde poterit haberi baſis CS diſtãtiæ à vertice ſi fiat vt radius 100000. ad ſinum cruris SD 91706. ità ſinus cruris CD 71345. ad inuentum primũ 65428. amplius vt dictus radius ad inuentum primũ 65428. ita ſinus verſus verticalis anguli CDS gr. 109. 45. qui eſt 133792. ad inuentum ſecundũ 87536., cui additus ſinus verſus differentiæ datorum crurum gr. 20. 59., & 6632. conſtituit ſinum verſum baſis CS 94168., vnde baſis CS eſt gr. 86. 39'. quanta eſt diſtantia centri ☉ à vertice, & gr. 3. 21. XS po altitudine ☉, vt quærebatur.

Aſt ſi quæratur altitudo, aut ſtellæ diſtantia meridiana à vertice, notâ poli altitudine, & declinatione ſtellæ, & parte Zodiaci, quam habet ſi ſtella fuerit in primo Zodiaci ſemicirculo addetur declinatio ſtellæ altitudini æquatoris, quæ tanta eſt quantus eſt arcus inter polum, & verticem, aut poli complementum, & ſcietur altitudo ſtellæ meridiana: vt ſi quæratur altitudo meridiana ☉ in principio ♋ ad polum gr. 44. 29. per huius complementum habetur altitudo æquatoris gr. 45. 31. ſupponiturque maxima ibi ☉ declinatio gr. 23. 30. ergo altitudo meridiana ☉ gr. 69. 1. in principio ♋; dematur gr. 23. 30., & fiet altitudo meridiana ☉ in initio ♑ gr. 22. 1. quibus habitis erunt diſtantiæ ☉ in principio ♋ à vertiee gr. 20. 59. & in initio ♑ gr. 67. 59., & huiuſmodi de cæteris.

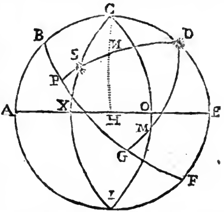
In fine notandum, quod ſi velit altitudo, aut à vertice diſtantia ſupputari in verticali primario CNH, & ſtella in N quamobrem conſiderato triangulo rectangulo DCN ad C rectangulo poterit, & ex dato crure CD, & ND hypothenuſa, & declinationis ſtellę complemento quæri crus CN in verticali primario.

De-

Depreſſionem Stellarum cognoſcere.

PVNCTVM XXXXI.

Etiam depreſſio ſtellæ eſt arcus verticalis inter centrum ſtellæ, & ipſius occiduum horizontem.



Si quæratur dato tempore maxima ſtellę depreſſio in aliqua regione ſi locus ſtellæ ſit in primis ſex Zodiaci ſignis detrahatur ab altitudine æquatoris ipſius declinatio, & reliqua erit depreſſio quęſita, ac ſi declinatio ſtellæ altitudini æquatoris addatur cum fuerit in cęteris ſex ſignis noſcetur maxima depreſſio.

Si quæri velit iſta depreſſio, vtcumq; conſiderabitur triãgulum obliquãgulum CDM in quo crus DM poteſt eſſe notum, & quadrans cum ſtella nullam habet declinationem, maius quadrante cum habuerit declinationem diuerſæ denominationis à polo D, & minus quadrante, cum habuerit declinationem eiuſdem denominationis cum polo D; amplius CD notum eſt, vt complementum altitudinis poli DE, atque notus eſt angulus CDM à datis cruribus comprehenſus, ex quibus noſci poteſt baſis CM.

Sit CD gr. 45. 31. & DM gr. *66.* 30. poſito exemplo ☼ in initio ♋, & quęratur depreſſio ipſius hora 3. Italica, conſtituente per diſtantiam à meridiano angulum CDM gr. 155. 30. erit igitur vt 100000. ad ſinum cruris DM *91706.* ita ſinus cruris DC 71345. ad primum inuentum 65428. etiam vt 100000. ad *65428.* ita ſinus verſus anguli verticalis gr. 155. 30., & *190996.* ad *124965.* inuentum ſecundum, cui ſi adiungatur ſinus verſus differentiæ cognitorum crurum *6632.* fiet ſinus verſus baſis CM 131597. cuius eſt arcus gr. 108. 25'. quorum quia CO eſt gr. *90.* erit OM depreſſio quæſita gr. 18. 25'.

PVNCTVM XXXXII.

STellæ meridianum aſſequentes, aut à meridiano recedentes diuerſos deſcribunt circulos verticales, vt per ſphæram demonſtrari poteſt intelligendo per Zenith, & centrum latæ ſtellę ductum aliquem maximum circulum, cum nomine verticalis, quare diuerſi anguli dictorum verticalium cum meridiano fiunt, & hi poterunt vel huiuſmodi inueniri.

In antecedentium problematum figura ſit ſtella in S diſtans ab æquatore per arcum PS, & ſit ductus per cẽtrum ſtellæ S maximus verticalis circulus CSIO faciens angulum SCD cum meridiano, qui quæritur, ac ſi nota erit altitudo poli DE erit notum ipſius complementum CD, ac ſi nota erit altitudo XS ſtellæ ab horizonte ortiuo, erit etiam nota ipſius à vertice C diſtantia CS, etiam ex nota ſtellæ declinatione PS erit ipſius notum complementum SD, aut SD ſi ſtella nullam habuerit declinationem erit quadrans, aut maior hoc ſi habuerit meridianam declinationem, vnde in obliquangulo triangulo ſphærico CSD, ex CD, CS habita baſi SD ſupputari poterit angulus verticalis SCD; & hic ſimiliter noſci poterit ſi ſint nota tantum duo crura CD, SD, & angulus comprehenſus diſtãtię à meridiano CDS, aut ſolum ex CS, CD, & angulo CDS, vt ex CS, SD, & angulo CSD.

Hic horum exempla defficiunt, quià in ſequentibus, per Tabulas, & dogmata Horologiorum ſatisfaciemus.

De Circulis Minoribus.

PVNCTVM XXXXIII.

CIrculi minores, quos hic explicandos aſſumpſimus ſunt quatuor. Tropicus Cancri, Tropicus Capricorni, Circulus Arcticus, & Antarcticus, ideſt contra Arcticum:

Dicuntur circuli minores quià ſphæram non diuidunt in duas partes æquales, prout faciunt circuli maiores, de quibus ſupra cognitum fuit:

Inſuper appellantur Tropici à græco verbo tropos, quod ſignificat conuerſionem, aut reditum, quoniam cum ☉ tropicum Cancri attingit, accedere vlterius ad nos deſinit, ſic cum ad Tropicum Capricorni perue-

uenit, receſſum à nobis terminat: etiam nominantur Solſtitia, quia ☼ dictos Tropicos aſſecutus non altius, aut depreſſius progreditur, & ſic quaſi à ſtando.

Tropici ergò ſunt limites Solis determinantes in Cœlo regionem, extrà quam Sol numquam euagatur, diſtantq; ab æquinoctiali circulo gr. 23. cum dimidio, aut quanta eſt Solis maxima declinatio ab eodem, quam format tropicus Cancri in parte Septemtrionali, & Tropicus Capricorni in Auſtrali.

Ex quibus orta fuit diuiſio Signorum Zodiaci in Aſcendentia, nempè quià extante ☼ in ipſis accedit ſemper ad verticem noſtrum, & in deſcendentia, quia in ipſis ſemper ☼ à noſtro vertice recedit.

Signa Aſcendentia ſunt ♑ ♒ ♓ ♈ ♉ ♊

Signa Deſcendentia ſunt ♋ ♌ ♍ ♎ ♏ ♐ vt aliàs.

Circulus Arcticus dicitur ab Arctos conſtellatione, quę & Vrſa dicitur, vocaturque Septemtrionalis à Septemtrione, aut Vrsà, quę ſeptem Stellis circa hunc circulum exiſtẽtibus efformatur, quę & triones, ideſt boues appellantur, eo quod tardè, vt boues moueantur: eiſdem nominibus polus Mundi nobis ſemper apparens, quia & circuli Arctici centrum eſt, nominatur; diametralis autem polus, ac circulus antarcticus appellatur, nec non & Auſtralis à Vento Auſtro flante ab eadem parte, & Meridionalis à plaga mundi Meridionali.

Suntq; polares hi circuli ducti per polos Zodiaci diſtãtes à polis Mundi quantitate maximæ Obliquitatis Eclipticæ, & qua eadem quantitate poli Mundi diſtant à polis Zodiaci.

Ex quibus præmiſſis colliguntur tres horum circulorũ proprietates.

Prima: quod tropici includunt viam ☼, quoniam vltrà eos Sol non mouetur, ſed, vt diximus, cum ad eos venerit incipit retrocedere.

Secunda quod polares circuli determinant diſtantiam polorum Zodiaci à polis Mundi, & maximam quoque Eclipticæ obliquitatem, ſiuè declinationem, quæ ſemper tanta eſſe debet, quanta eſt diſtantia polorum Zodiaci à polis mundi, quod demonſtratur: Sumatur Colurus diſtinguens Solſtitia, & tranſiens per polos Mundi, ac Zodiaci: deindè, quoniam omnes quartæ eiuſdem circuli inter ſe met ipſas ſunt æquales, Quarta huius Coluri incipiens ab æquinoctiali, & quæ progreditur ad polum Mundi, erit æqualis quartæ eiuſdem Coluri incipientis à primo puncto Cancri, & progredientis ad polum vſq; Zodiaci: dempto igitur ab his duabus partibus æqualibus arcu communi, qui incipit à primo puncto Cancri, & aſſequitur polum Mundi, arcus reſidui erunt æquales, vi-

videlicet maxima obliquitas Eclipticæ, & diſtantia inter polum Mundi, ac Zodiaci.

Tertia: quod duo Tropici, & duo polares circuli, tam in Cœlo, quam in terra conſtituunt Zonas, vt infrà.

De Zonis.

PVNCTVM XXXXIV.

PEr ſupradictos minores circulos, tropicos ſcilicet, & polares in toto corpore cœleſti intellectos remanet totum Cœlum diuiſum in quinque partes, regiones, ſiuè Zonas, atquè ex Cœlo partes Terræ directè ad perpendiculum partibus Cœli ſubiacentes in vnam Torridam, duas temperatas, & duas frigidas, cauſâ proximitatis, aut longiquitatis ☉, vndè Vergilius in Georgica:

Quinque tenent Cœlum Zonæ, quarum vna coruſco
Semper Sole rubens, & torrida ſemper ab Igne &c.

Et Ouidius 1. Metamorph.

... totidèmque plagæ Tellure premuntur,
Quarum, quæ media eſt, non eſt habitabilis æſtu;
Nix tegit alta duas, totidèm inter vtramque locauit,
Temperiemque dedit mixtà cum frigore flamma, &c.

Torrida ſeù ardens Zona ponitur inter Tropicum Cancri, & Tropicum Capricorni, & ſic dicitur, quia eſt ſemper ſub Sole percurrente ſuper ipſam terreſtrem:

Et quamquàm ſub hac torrida duæ ſint æſtates Sole in æquinoctio, per verticem tranſeunte, duæque hyemes, ſed meliùs, ac potius in Solſtitijs duæ caloris remiſſiones, non ſequitur tamen quod ſit inhabitabilis, quoniam noctis temperie continuis imbribus, auris frigidè flantibus ex altiſsimis Montibus, alijſque Cœli, terræque beneficijs fere temperata refertur, & docuit Hiſpanorum nauigatio hanc partem eſſe habitabilem:

Habitantes ſub Æquatore, vbi Zonę torridæ medium eſt perpetuum habent æquinoctium, ſydera eis æqualiter oriuntur, & occidunt, & vocantur Amphiſcij quia vmbram, tam verſus polum Arcticum, quàm Antarcticum conſpiciunt.

Heteroſcij quales vocantur habitatores ſub Tropico, cum vna tãtum vmbra fruantur in Auſtrum, vel Septemtrionem pro ratione Tropici Can-

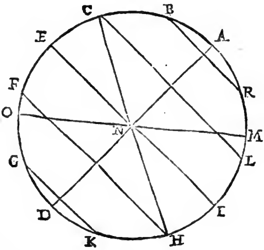
Cancri, vel Capricorni vnicam æſtatem, & hyemem habent, & cum dies æſtiua his ſit longior intenſiores experiuntur calores quam Amphiſcij ſub Æquatore: habent inſuper dierum, ac noctium artificialium inęqualitatem, Stellas ſub polo Arctico perpetuæ apparitionis reſpectu incolarum ſub Tropico Cancri, ſicut Antarctico occultæ, & è contrà contingit habitatoribus ſub Tropico Capricorni.

Zonæ duæ frigidæ circumſcribuntur à circulis Arctico, & Antarctico, quià cum ſint ab Orbita Solis remotiſsimæ, eius obliquos radios recipiendo nequeunt excaleſieri.

Cætera duo ſpatia, quæ numerantur in Sphæra ſunt aliç duç Zonç temperatę, cum ex Solis acceſſu, atque receſſu radios eiuſdem, modò rectos, modò obliquos, ac conſecutiuè frigiditatis, & caloris viciſsitudines diuerſis tempeſtatibus experiantur; harum incolç dicuntur etiam Heteroſcij, & iſtorum qui magis recedunt à Tropico ſuo minores calores, & dies, noctesque inęqualiores habent.

Periſcij, aut contrà vmbratiles dicuntur incolç, vbi eleuatio poli eſt gr. *66.* 3ò, nempè ſub circulis arctico, vel antarctico.

Eſt in ſequenti figura Meridianus, & Colurus Solſtitiorum GCMH.



Axis mundi D N A, & colurus æquinoctiorum.
B R circulus Arcticus, & Zona frigida lata grad. 23. 3ò.
C L Tropicus æſtiuus.
E I æquinoctialis.
F H tropicus hyemalis.
G K circulus Antarcticus, & alia Zona frigida, etiam lata gr. 23. 30.
ONM Horizon.
C H Zodiacus.
FCHL tota latitudo Zonæ torridæ gr. 47.
FGKH latitudo Zonæ temperatæ Auſtralis gr. 43.
CBRL latitudo Zonæ temperatæ Septemtrionalis etiàm gr. 43.

Pro praxi locus omnis, qui habebit ab Æquatore latitudinem minorem gr. 23. 30''. erit in Zona Torrida, vltrà hos vſque ad gr. *66.* 3ò. erit

in

in temperata, & vltrà gr. *66. 36.* vſq; ad gr. *90.* erit in Zonæ frigida.

De climatum Diſtinctionibus.

PVNCTVM XXXXV.

PEr Climata deſignantur terrę partes ſecundum latitudinem ab Auſtro Septemtrionem verſus ex ſenſibili dierum maximorum variatione differentes.

Primi Climatis initium poſuerunt Coſmographi, vbi dies maximus eſt horarum 12. cum dimidia.

Secundum clima ſtatuerunt, vbi dies maximus eſt hor. 13. & ſic vſq; ad finem de media in mediam horam, & facilè cognoſcentur climata per adiunctam tabulam maximarum dierum in correſpondentibus poli altitudinibus.

Altitudo Poli.	H.	M.
Gr. o.	Æquinoctium continuum.	
1	12	3
1	12	7
3	12	10
4	12	14
5	12	17
6	12	21
7	12	24
8	12	28
9	12	31
10	12	35
11	12	39
12	12	42
13	12	46
14	12	50
15	12	53
16	12	57
17	13	1
18	13	5
19	13	9
20	13	13
21	13	17
22	13	21
23	13	25
24	13	29
25	13	33
26	13	38
27	13	42
28	13	47
29	13	52
30	13	57
31	14	1

Altitudines Poli.

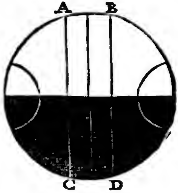
	H.	M.
32	14	6
33	14	11
34	14	16
35	14	22
36	14	28
37	14	34
38	14	39
39	14	45
40	14	52
41	15	0
42	15	6
43	15	12
44	15	18
45	15	26
46	15	34
47	15	42
48	15	52
49	16	0
50	16	10
51	16	20
52	16	30
53	16	44
54	16	54
55	17	8
56	17	22
57	17	36
58	17	52
59	18	11
60	18	29
61	18	53
62	19	19
63	19	49
64	20	25
65	21	11
66	22	23
66 $\frac{1}{2}$	24	0

PVNCTVM XXXXVI.

QVi habitant ſub eadem Zona, eodem Meridiano, locíſque diametralibus eiuſdem paralleli, vt in figura, qui habitant in AC, & BD. vocantur Periæci.

Antęci dicuntur contrà habitabiles, & quantum vertex vnius verſus Septemtrionem eſt, tantum alterius verſus Auſtrum vt A. B; & C. D.

Antipodes, quaſi pedibus obuerſis incedentes ſunt, qui habitant ſub Meridiano communi, locíſque Terrę per diametrum oppoſitis vt AD, & BC.



De dierum naturalium æquatione.

PVNCTVM XXXXVII.

PRo nunc, & pro verò tenendum eſt, quod dies naturales multas ob cauſas ſunt intér ſe inęquales, & gratia huius adnotabitur, quod diei naturalis nomine tria intelligi poſſunt, ſcilicet dies ſydereus, qui nihil aliud eſt, quam integra eiuſdem ſtellę fixę reuolutio ab eodem ad idem ferè punctum eiuſdem horizontis, aut meridiani; ſecundò dies pimi mobilis, qui eſt tempus quo punctum aliquod ęquatoris in ſupremo Cœlo, ab vno meridiani, vel horizontis puncto ad idem eiuſdem meridiani, vel horizontis punctum reuoluitur; tertiò dies ſolaris, qui importat integram Solis reuolutionem ab eodem ab eumdem horizontem, vel meridianum, prętermittendo Pythagoricam, Coperniceamq; ſententiam.

Inæqualitas motus Solis in Ecliptica, Solis Apogæi motus, atque obliquitas Eclipticæ cum æquinoctiali ſunt cauſæ potiſſimæ inæqualitatis dierum naturalium.

Quamobrem cum appareat dierum inęqualitas oportet Aſtronomos

æqualem diei quantitatem ſupponere,& ſic ſupponunt diem quamdam mediam conſtantem ex integra reuolutione æquatoris,& paruò additamento, quod medio motui Solis gr. o. min. 59. & ſec. 8. correſpondet eiuſdem æquatoris, ſed quoniam dies vera conſtat ex integra reuolutione æquatoris,& paruo additamẽto quod vero motui Solis, à quo circa Apogæum minimus, & circà Pærigeum maximus,lociſq; inter medijs, medius perficitur, correſpondet, hinc innoteſcit altera inæqualitatum diei naturalis.

Ex motu ſolaris apogæi inæqualitatem patiuntur dies,quià longiores ſolis dies, in alios dies anni Ciuilis labuntur, & ſic hoc explicat P. Ricciolus dicens: nam quando Solis apogæum fuit in ♈ initio, & Perigæum in principio ♎, nempè in exordio mundi, Æquinoctialis dies Vernus breuiſſimus, ob tardiſsimum motum Solis; Æquinoctialis autem dies Autumnalis longiſsimus fuit, ob velociſſimum Solis motum, nunc verò ſolſtitiales dies Æſtiui breuiſsimi, & brumales longiſſimi, eo quod tunc Sol ſit ibi in Apogæo, hic in Perigæo; & ne confundaris, diſtingui diem in artificialem,& naturalem ſcias, & quod artificialis illud tantum temporis continet, quo Sol percurrit Hemiſpherium ſuperius, & quod dies naturalis diem artificialem, vna cum nocte comprehendit, & de hoc in præſenti.

Obliquitas eclipticæ, & æquatoris cauſa eſt, quod non poſſunt correſpondere arcus æquatoris æquales arcubus eclipticæ, vnde inæquales dies producuntur.

Æquatio igitur dierum naturaliũ reperietur, dum notus ſit locus Solis, ex ſubtractione arcus ęquatoris minoris à maiori, & eclipticę ☉, & ex differentia inter motum medium, & verum Solis conſiderando ſuos titulos additionis, vel ſubtractionis, vt exempli gratia. Quæratur æquatio diei naturalis 22. Octobris Anno 1674. medius motus ☉ ad hoc tempus eſt ſig. 7. 1. 9'. 31''. & verus ſig. 6. 29. 21'. 45'. horum differentia eſt gr. 1. 47'. 46'. hæc ducta in horas &c. per punctum 25. eſt min. 7. 11'''. 4'''. & eſt ſubtrhenda: amplius locus ☉ eſt in gr. 209 21'. 45'''. cui competit æquatoris portio gr. 207. 17'. 27''. horum differentia eſt gr. 2. 4'. 18''. & hæc etiam ſubtractiua ob exceſſum loci eclipticę, ducta in tempus eſt min. 8. 17'. 12''. hę differentię iuguntur, quia eiuſdem denominationis, & fit tota ęquatio ſubtractiua min. 15. 28''. 16''. ſic huius ęquationis appoſitam tabulam ſupputaueram, in quam ſit ingreſſus cũ verò loco Solis, & adhibita parte proportionali proſilit facillimè vera ęquatio quæſita: die 22. Octobris dicta, fuit verus locus ☉ in gr. 29.

 21.

21'. 45''. ♎: cum gr. 29. in latere, & ſigno ♌ in fronte noſcitur arealiter ęquatio min. 15. 25''. & adhibita parte proportionali per differentiam ſec. 9. pro min. 21. 45''. exquiſitè correſpondens ęquatio extrahitur, vt ſupra min. 15. 28''. 16'''.

Quo ad titulos, ęquatio addetur, vel ſubtrahetur, prout tituli tabellę, cum tempus apparens conuertendum erit in ęquale, & contrariò operabitur cum æquale conuertendum èrit in apparens, & quidem per ſupradicta innoteſcit quid importet tempus ęquale, nunc addo, quod tempus apparens dicitur tempus illud, quo aliquod in Cœlo obſeruatum eſt.

Hęcque tabula, ſpretis ſecundis, facillimè inſeruiet citrà errorem annis centum, ab anno 1674.

Cognita Solis à vertice diſtantia, & Gnomonis, aut ſtyli proportione vmbras rectas factas à Sole per dictum Gnomonem in Plano Horizontali menſurare.

PVNCTVM XXXXVIII.

INtelligantur hic repetitę cognitiones, & figura ſecunda de linea Meridiana, quam ſupra expoſuimus puncto 16.

Supponatur etiam in dicta figura Gnomonem F G, conſtare partibus duodecim æqualibus, vel alijs partibus ad libitum;

Hiſce præmiſſis, quoniam debet eſſe quoque cognita diſtantia ☉ à vertice, ſupputata iuxtà punctum ſuperius, erunt exempli gratia in triangulo plano FGB, rectangulo ad G, duo cognita, ideſt angulus G F B, qui eſt æqualis angulo S F V, diſtantiæ ☉ à vertice, cum ſint anguli ad verticem, & latus FG, quare ſi fiat vt radius ad crus datum, ità tangens anguli dati ad crus reliquum quæſitum, poterit inueniri crus GB, quantitatis vmbræ quæſitæ; ſed apponemus faciliorem ſupputationem per logotithmos.

Sit quærenda latitudo vmbræ ☉, cum eſt initio ♋ hora 9. ad eleuationem poli gr. 44. 29'. quo tempore fuit inuentum ſuprà ☉ habere gr. 86. 39'. diſtantiæ à vertice.

Latus OG, partium 12. habet	L.	107918.
Angulus GOR, gr. 86. 39'.	M.	1123258.
Quare GE, partium 205.	ex L.	231176.

talium, qualium

Gno-

Gnomon FG. habet dictas partes duodecim, & ſic vmbra GB, erit longa, quam ſit altus Gnomon FG, vicibus 17. & vnà parte dictarum duodecim eiuſdem Gnomonis.

Aſt quoquè facilius operaberis, & breuius ſi Gnomonem tuum ſuppones conſtare partibus tantum decem, quarum quælibet, intelligatur quoquè diuiſa in alias decem partes, &c. ſic enim ſumendo ſolum Tangentem diſtantiæ ☼ à vertice, habebis quæſitam vmbræ proportionem: ex. gr. fuit ſupra diſtantia ☼ à vertice gr. 86. 39'. horum Tangens eſt, omiſſis cæteris minutijs, 1708. & ſic facta diſtinctione numerornm 17. o. 8. quare vmbræ proportio quæſita Gnomonum 17. & vnius circiter partis illarum decem, de quibus Gnomonem tuum conſtare ſuppoſuiſti, diximuſq; vnius circiter partis illarum decem propter n. 8. quem tertio loco vides, connotat enim ferè vnam partem illarum decem Gnomonis, nam ſecundo loco adeſt o. quod ſi adeſſet 1. vel 2. &c. connotarentur tot partes illarum decem Gnomonis, prima namque diuiſio tot Gnomones, ſecunda partes earumdem decem Gnomonis, tertiaq; partes cuiuslibet illarum decem, prout diximus de minutis, ſecundis, &c. graduum, & horarum, ſignificat, & ità in cæteris.

Et animaduerte, quod hæ vmbrarum latitudines erunt ſiniſtræ pro horis poſt meridiem, dextræ autem pro horis ante meridiem.

Siniſtræ hoc eſt in delineatione Horologij ſolaris menſurandæ ad manum ſiniſtram delineantis, dextræ ad manum dextram.

De Planis declinantibus, & inuenienda eorumdem declinatione.

PVNCTVM II.

PRo Planis intelligenda erunt corpora materialia ædificiorum, aut ſecundum totum, vel ſecundum partem.

Plana hæc diuiduntur in Horizontalia, Verticalia, ſiue muralia, ac in inclinata.

Plana Horizontalia ſunt ea, quæ Horizonti parallela ſunt: Verticalia, quæ eidem Horizonti ſunt perpendicularia.

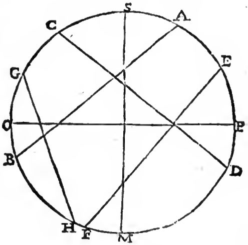
Inclinata, aut inflexa dicuntur ea, quæ non ſunt Horizonti parallela, ſed cum ipſo aliquem angulum efformant.

Inſuper Verticalia diſtinguuntur in ea, quæ Meridiei, quæ Septemtrioni, quæ Orienti, quæ Occidenti parallela ſunt, proindeq; iuxtà faciem Meridiei, vel Septemtrioni, &c. parallelam dicuntur reſpicere, vel

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vel Meridiem, aut Septemtrionem, &c. & in ea, quæ declinant à Meridie, vel Septem trione ad Ortum, ſiue ad Occaſum, quod accidit quotieſcunque Planum verticale non eſt parallelum Meridiei, aut Septemtrioni, &c.

Hæcque declinatio eſt ea, quæ in præſenti proponitur inuenienda: ſed ad maiorem dilucidationem vide ſchema ſequens, in quo conotat O Solis Ortum, P Occaſum, M Meridiem, S Septemtrionem, cæteræque lineæ repræſentant plura plana verticalia, & non parallela, vt ſupra, vnde planum verticale CD dicitur declinare à Meridie ad Ortum; E F, à Meridie ad Occaſum, AP à Septemtrione ad Ortum, GH à Septemtrione ad Occaſum.



Et intellige quod quando Planum aliquod declinare dicetur à Meridie ad ortum, hoc erit quando idem Planum reſpiciet ſecundum faciem ſuam Ortum, & Meridiem, vt facies CD, quando dicetur declinare à Septemtrione ad Occaſum, hoc erit, quando facies Plani reſpiciet Septemtrionem, & Occaſum, vt GH, ac huius modi in alijs.

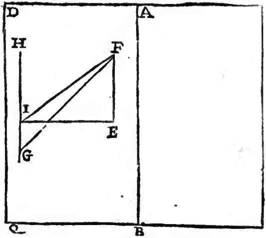
Quatuor Mundi partes principales, Ortum ſcilicet, Occaſum, Meridiem, ac Septemtrionem ſic diſtingues: Obſerua partem Mundi, vbi ☼ oritur ad eamque volue te videntem, quoniam poſt humeros Occaſum, ad dextrā manum Meridiem, & ad ſiniſtrā Septemtrionem habebis.

Oportetque hiuſmodi noſcere ad quas Mundi plagas verticale planum vertatur, vt cognoſcas habitudines ☼ ſuper idem, nam ſi vertatur ad Occaſum ſcies exempli gratia horas ortus per ipſum patere non poſſe, & è contrà, ſi ad Ortum, horas Occaſus proportionabiliter ad menſuram declinationis: ità ſi vertatur ad Meridiem horas Cancri, & ad Septemtrionm horas Capricorni.

Pro inuenienda hac Planorum Verticalium declinatione, omiſſo Magnetis auxilio, ea enim, vt potius, à vera Meridiana deflectit, erit tibi methodus exemplum præſens omnibus alijs commune: in Plano verticali

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ticali DAQB figatur gnomon EF ad angulos rectos cum eodem plano; dein aliqua die obſeruetur auxilio alterius Meridianæ, vmbra Meridiana emiſſa à fixo Gnomone in eodem plano verticali, & ſit exempli gratia FG; hac obtẽta, ad punctum G terminalem vmbrę Meridianę ducatur perpendicularis HG, quæ erit Meridiana plani verticalis, & ſic ad punctum E perpendicularis IE, quæ dictabit gnomonis diſtantiam à Meridiana, coniunctiſque IF, erit factum rectangulum in E triangulum IFE, in quo, quia notum eſt crus EF, quantitatis ſcilicet Gnomonis ſuppoſitæ, & crus IE in proportione earumdem partium Gnomonis, inueniri poterit angulus IFE quæſitæ declinationis.



Ac ſi ſuppones Gnomonem tuum cõſtare partibus decem, & quamlibet earum decem alijs decem, vnde habebit gnomon partes 100. eademque proportione menſurabis IE, ictu ferè oculi operationem expedies, addendo enim tres notas o quantitati inuentæ eſſe IE, habebis tangentem anguli IEF, cuius arcus indicabit tibi gradus, & minuta quæſitæ declinationis. Sit exempli gratia IE partium 130. qualium EF eſt 100. dictis 130. addantur tres notæ o, eritque tangens 130000. cui cõpetit arcus gr. 52. min. 26. & gr. 52. min. 26. erunt quæſita declinatio.

Altera quoque methodo hanc Verticalium Planorum declinationem venari valebis, ſi diligenter animaduertes momentum temporis, quo ☼ per tranſiens ſupra planum verticale, in quo vult Horologium ordinari, nullam per ipſum emittit vmbram, vnde tibi ſignum ſit verticalem circulum ☼ coincidere cum circulo verticali Plani, nam ſi eodem momento temporis ſupputabis angulum circuli verticalis ☼ cum Meridiano per antecedens punctum 42. ipſe angulus erit quæſita Muri declinatio.

Imo etiam, ſi te non pigebit ſupputationum, ad quodcunque temporis momentum eamdem declinationem cognoſcere poteris menſurando vmbram à facie, vel latere Plani verticalis emiſſam, ſi enim ad idem mo-

momentum temporis calculabis, vt ſupra, angulum Verticalis ☼ cum Meridiano, ipſumque conferes cum angulo ex quo vmbra eſt, habebis pariter quæſitam declinationem.

Vmbrarum latitudinem in Planis Verticalibus exactè Meridiem aſpicientibus cognoſcere.

PVNCTVM L.

QVoniam nulla horæ circumferentia Septemtrionalis cadere poteſt ſuper planum verticale præciſè Meridiem aſpiciens, ideò Tangens anguli verticalis Auſtralis exhibebit quæ ſitam vmbræ latitudinem in partibus ijs quibus gnomonem partibus decem conſtare ſupponetur.

Vbi nota, quod anguli Verticalis Horarum, & Meridiani vocantur quoque circumferentiæ horizontales, hæ namque dictos angulos verticales menſurant.

Quia horæ 23. 22. 21. ♋ habent horizontales circumferentias Septemtrionales, ſicuti h. 12. 11. 10. 9. &c vt apparebit ex alijs, & ex Tabulis infrà connectendis, ideò ſuper hoc planum cadere non poterunt.

Igitur quærantur pro plano hoc Vmbrarum latitudines competentes in altitudine poli gr. 44. m. 29

Horis:	Anguli cum Meridiano.		Tangentes, & vmbræ latitudo.
	G	M	
20.	83.	48.	9205.
19.	70.	50.	2877.
♋ 18.	52.	50.	1319.
17.	25.	8.	469.
16.	12.	3.	213.
15.	44	3.	967.
14.	65.	1.	2146.
13.	79.	25.	5352.

Et huiuſmodi pro omnibus horis ♑, quæ omnes habent circumferentias Auſtrales.

Neq; latitudines omnes vmbrarum erunt deſignandæ ad manum ſiniſtram pro circumferentijs Orientalibus, & ad dextram pro Occidentalibus, quod cognoſcetur etiam ab infrà dicendis:

Poteriſque per ſupra poſitas tangentes, ac alias, inuenire quamcumq; ex

ex Gnomonis datâ, proportionem volueris, vt ſi Gnomon conſtet partibus 12. tangentem multiplica per 12. productumque diuide, vt ſupra, habebiſque in partibus, & minutijs quæſitam vmbræ latitudinem, & de quo reminiſceris etiam in omnibus alijs.

In Planis Verticalibus directè ad Septemtrionem reſpicientibus Vmbrarum latitudines pariter inuenire.

PVNCTVM. LI.

EX eo quia in hæc plana cadere non poſſunt horæ habentes circumferentias cum denominatione Auſtrali, ſicuti quò ad nos hor. 20. 19. 18. 17. 16. 15. 14. 13. omneſque horæ ♎, ideò cæterarum horarum ſumantur anguli Verticales cum Meridiano, & horum Tangentes, ex quarum proportione innoteſcet Vmbræ in his planis latitudo quæſita verbi gratia.

		o. '	Vmbræ latitudines
Anguli verticales S. hor	23	66.10	2264
	22	75.48	3952
	21	85.32	12801
♋		Tangentes	
	12	89.10	68750
	11	79.20	5309
	10	69.40	2699
	9	59.50	1720

In hiſce planis latitudines erunt dextræ, ſi circumferentiæ horarum erunt Orientales, & ſiniſtræ, ſi Occidentales.

Pro planis verticalibus Orientem preciſè reſpicientibus.

PVNCTVM LII.

IN hiſce Planis nulla hora accidit, cuius verticalis angulus ſit Occidentalis.

Quarè angulorum Verticalium Orientalium compleméta ſumantur, horumque tangentes, quæ indicabunt quæſitam Vmbræ latitudinem, dextram ſi anguli verticales fuerint Auſtrales, ſiniſtram ſi Septemtrionales: exempli gratia.

H.	Anguli Verticales ♋ ° '	Cōplementa ° '	Tangentes Vmbræ latitudines
9.	59.50	30 10	581
10.	69.40	20 20	371
11.	79.20	10 40	188
12.	89.10	0 50	15
13.	79.25	10 35	187
14.	65. 4	24 59	466
15.	44. 3	45 57	1034
16.	12. 3	77 57	4685

Et ſimiliter pro horis Orientalibus ♑.

Pro Planis Verticalibus ad Occidentem praciſè ſpectantibus.

PVNCTVM LIII.

NVlla hora habens Orientalem circumferentiam his planis congruit.

Accipiantur igitur circumferentiarum Occidentalium complementa, eorumque tangentes, quæ pariter exhibebunt quæſitas vmbræ latitudines, dextras reſpectu earumdem circumferentiarum Septemtrionalium: ſiniſtras autem reſpectu Auſtralium.

H.	Anguli Verticales ♋ ° '	Complementa ° '	Tangentes Vmbræ latitudines
17.	25. 8	64 52	2132
18.	52.50	37 10	758
19.	70.50	19 10	348
20.	83.48	6 12	109
21.	85.32	4 28	78
22.	75.48	14 12	253
23.	66.10	23 50	442

Ac huiuſmodi reperies pro horis Occidentalibus ♑.

In Planis verticalibus declinantibus à Meridie ad Ortum.

PVNCTVM LIV.

DIſtingue tres caſus.

I. Si angulus verticalis horæ habebit denominationem Septemtrionalem ſimul, & Orientalem, addatur eius complemento comple-

plementum declinationis Muri, & inuenta aggregati Tangens dictabit quæſitam Vmbræ latitudinem ſiniſtram: Exemplum: ſiti nuenienda latitudo horæ 10.♋ pro Muro declinante à Meridie ad Ortum gr.25. in noſtra poli eleuatione gr. 44. m. 29.

Angulus verticalis hor. 10.♋, gr. 69. 40. Complementum gr. 20. 20. eſtque Septemtrionalis, ac Orientalis: Complementum declinationis Muri gr. 65. aggregatum horum Complementorum grad. 85. 20. horumque Tangens 12251., quæ more ſolito diuiſa præbet quæſitam Vmbræ latitudinem ſiniſtram partium 122. m. 51. qualium Gnomon ſupponitur habere decem, & ſemper de hoc in alijs memoraberis. Sit inſuper exemplum pro hor. 11. ♋, pariter Septemtrionalis, ac Orientalis.

Angulus huius horæ verticalis gr. 79. 20. Complementum gr. 10. 40. Complementum declinationis Muri gr. 65. Summa horum Complementorum gr. 75. 40. quibus competit pro quæſita Vmbræ latitudine ſiniſtra Tangens 3914. aut 39. 14'.

II. Si Angulus verticalis horæ geret denominationem Orientalis, ſed erit Auſtralis, fac ſubtractionem inter anguli verticalis Complementum, atque Complementum declinationis Muri, ſubtrahendo ſcilicet minus à maiore, & Tangens reſidui erit quæſita vmbræ latitudo, dextra quidem, ſi ex dictis numeris Complementum declinationis eſt minus altero Complemento, ſiniſtra verò ſi maius. Exemplum: pro hor. 13. ♋ in ſupradicta Verticalis Plani declinatione gr. 25. Circumferentia huius Horæ Orientalis, & Auſtralis eſt gr. 79. 25. Complementũ gr. 10. 35. Complementum declinationis Muri gr. 65. differentia gr. 54. 25. horumque Tangens 1398. vmbræ quæſita latitudo ſiniſtra ex eo quod Complementum declinationis eſt maius horizontalis circumferentiæ Complemento.

III. Si Angulus verticalis horæ habebit denominationem Occidentalis, & Auſtralis, addantur ſimul dictus Angulus, & declinatio Muri: pro exemplo: quæratur vmbræ latitudo pro hor. 17. ♋, Occidentali, & Auſtrali: Angulus verticalis huius horæ gr. 25. 8'. declinatio Muri gr. 25. ſumma gr. 50. 8'. quorum Tangens 1197. vmbræ latitudo quæſita ſemper dextra.

Vbi nota quod horæ habentes ſuum Angulum verticalem cum Titulo Occidentalis, & Septemtrionalis, non cadunt ſupra planum declinans à Meridie ad Ortum.

PVNCTVM LV.

Diſtinguendi quoque veniunt tres caſus.

I. SI Angulus horæ Verticalis eſt Orientalis, & Auſtralis, addatur eidem declinatio Muri, eritque per tangentem ſummæ optata latitudo vmbræ ſiniſtra.

II. Si Angulus Verticalis horæ eſt Occidentalis, ac Auſtralis, ex ipſius Anguli Complemento, & Complemento declinationis fiat ſubtractio numeri minoris à maiore, tangenſq, reſſidui erit vmbræ latitudo dextra ſi ſit maius Complementum declinationis Muri dicto Verticali Angulo, ſed ſi minus, ſiniſtra.

III. Si dictus horæ Verticalis Angulus eſt Occidentalis Septemtrionalis, addatur eius Complemento Complementum declinationis Muri, ac per tangentem aggregati erit vmbræ quæſita latitudo dextra.

Et hic animaduertendum circà horas gerentes Angulos ſuos Verticales cum qualitate Orientalitatis, & Septemtrionalitatis quod ab his planis Verticalibus declinantibus à Meridie in Occaſum non amplectuntur.

Ecce tibi horum omnium exempla.

Quæritur Vmbræ latitudo pro hora 23. ♋ in Plano Verticali declinante à Meridie in Occaſum gr. 25. & ſub altitudine poli gr. 44. 29'. Angulus Verticalis hora 23. ♋ eſt Septemtrionalis, ac Occidentalis, ideò ſecundum prædictum tertium caſum Angulus Verticalis hora 23. dat ſuum Complementum gr. 23. 50. Complementum declinationis Muri gr. 65. ſumma gr. 88. 50. Tangens 49104. ſeu part. 491. 4'. pro quæſita Vmbræ latitudine dextra.

Pro hora 22. Complementum Anguli Verticalis gr. 14. 12'. Complementum declinationis Muri gr. 65. aggregatum gr. 79. 12'. Tangens 5242. aut p. 52. 42.

Pro hora 21. Complementum Anguli Verticalis gr. 4. 28'. Complementum declinationis Muri gr. 65. ſumma gr. 69. 28'. Tangens 26. 70.

Pro hora 20. hæc habet Angulum ſuum Verticalem Auſtralem Occidentalem, quare in ſecundo caſu ſuprà enunciato, vndè huiuſce Anguli Verticalis Complementum gr. 6. 12. Complementum declinationis Muri gr. 65. differentia gr. 58. 48' Tangens 16. 51.

Pro hora 19. huius Complementum de Angulo Verticali gr. 19. 10. Com-

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Complementum declinationis Muri gr. 65. differentia gr. 45. 5ò. Tangens 10. 30.

Pro hora 18. Complementum Anguli Verticalis gr. 37. 1ò. Complementum declinationis Muri grad. 65. differentia gr. 27. 5ò. Tangens 5. 28.

Pro hora 17. Complementum Anguli Verticalis gr. 64. 52'. Complementum declinationis Muri gr. 65. differentia gr. 0. 8'. Tangens 0. 2'.

Pro hora 16., quæ eſt Orientalis Auſtralis aperitur locus primæ regulæ in primò caſu præſcriptæ: igitur Angulus Verticalis horæ 16. gr. 12. 3. declinatio Plani Verticalis gr. 25. ſumma grad. 37. 3'. Tangens 7. 55.

Pro hora 15. Angulus Verticalis gr. 44. 3. declinatio Muri gr. 25. ſumma gr. 69. 3'. Tangens 26. 12.

Horis 14. & 13. non ſupputantur vmbrarum latitudines, quoniam ex aggregato eorumdem Angulorum Verticalium cum Muri declinatione fit exceſſus vltrà Quadrantem: ſic & horis cæteris, quoniam habent denominationem Orientalem, atq; Septemtrionalem, quæ in hæc plana cadere non poſſunt, vt ſuprà animaduerſum fuit.

Pro hora 16. & quæ eſt Orientalis Auſtralis, & ſic ſupputanda eius vmbræ latitudo per dogma primi caſus, communis quoquè cæteris horis & vſque ad huiuſce Meridiem: ideò Angulus Verticalis horæ 16. gr. 49. 11. declinatio Muri gr. 25. aggregatum gr. 74. 11. Tangens 35. 30.

Pro hora 17. Angulus Verticalis gr. 37. 23. ſumma cum Muri declinatione gr. 62. 23. Tangens 19. 11.

Pro hora 18. Angulus Verticalis gr. 24. 19. aggregatum cum Muri declinatione gr. 49. 19. Tangens 11. 63.

Pro hora 19. Angulus Verticalis gr. 9. 52. cum Muri declinatione gr. 34. 52'. Tangens 6. 97.

Pro hora 20. hæc, & ſequentes habentes Angulum verticalem Occidentalem, & Auſtralem calculum ſuſcipere debent à regula ſuprà poſita in ſecundo caſu: quamobrem Complementum Anguli Verticalis horæ 20. gr. 85. 2ò. Complementum declinationis Muri gr. 65. differentia gr. 20. 2ò. Tangens 3. 71.

Pro hora 21. Complementum Anguli Verticalis gr. 70. 47'. differentia cum Complemento declinationis Muri gr. 5. 47. Tangens 101., aut 1. 1.

Pro hora 22. Complementum anguli verticalis gr. 57. 14 differentia à Complemento declinationis Muri gr. 7. 46. Tangens 1. 36.

Pro

Pro h. 23. Complementum anguli verticalis gr. 44. 59. differentia cum Complemento declinationis Muri gr. 20. 1. Tangens 3. 64.

In Planis Verticalibus à Septemtrione ad Ortum declinantibus.

PVNCTVM LVI.

ETiam in his tripliciter diuidendum, nam horæ habentes angulos ſuos Verticales cum denominatione Auſtralis, & Occidentalis ab his Planis ab Aquilone ad Orientalem plagam declinantibus ſuſcipi non valent.

I. Regula. Si angulus verticalis horæ eſt Septemtrionalis Orientalis ſume eius Complementum, quod deindè compara cum Complemento declinationis Muri, ac, ſi minus fuerit, ſubtrahe ab ipſo Complemento declinationis Muri, ſed, ſi maius, deme ab eo Complementum declinationis Muri, & in vtroque caſu Tangens reſſidui exhibebit quæſitam Vmbræ latitudinem, dextram ſi Complementum anguli Verticalis fuerit minus Complemento declinationis, ſiniſtram verò ſi maius.

Ex. gra. Quærenda ſit vmbræ latitudo pro h. 9., quæ habet titulum Orientalis Septemtrionalis; huius angulus Verticalis in ♋, eſt gr. 59. 50. Complementũ g. 30. 10. quod, quia eſt minus Cõplemento declinationis Muri gr. 65'. ideò id ab hoc aufertur, & remanent gr. 34. 50. quorum optata Tangens 6. 96.

II. Si angulus horæ verticalis erit Orientalis Auſtralis, adiungatur eius Complemento Complementum declinationis Muri, eritque latitudinis Tangens dextra.

Pro exemplo quæritur pro h. 13. ♋, quæ eſt Orïẽtalis Auſtralis. Complementum anguli h. 13. gr. 10. 35. Complementum declinationis Muri gr. 65. collectio gr. 75. 35. Tangens 38. 90.

III. Si angulus horæ verticalis fuerit Occidentalis Septemtrionalis Tangens ſiniſtra, ſed in noſtro aſſumpto exemplo nulli horæ Septemtrionali Occidentali poteſt ſupputari vmbræ latitudo propter exceſſum ſupra Quadrantem, vt alias quoque præbuimus.

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In Verticalibus Planis declinantibus à Septemtrione ad Occaſum.

PVNCTVM LVII.

PRo his quoq; Planis tres caſus, ac Regulæ animaduertendæ ſunt. At præmittendum eſt, quod horæ tenentes angulum verticalem cū nota Orientalis, & Auſtralis non dantur conſpici in Muro declinante à Septemtrione ad Occidentem.

I. Hoc poſito, primus erit caſus cum horæ verticalis angulus erit Septemtrionalis Orientalis, quo euentu fiat aggregatum ex eodem cum Muri declinatione, fietque tangens vmbræ latitudinis dextra.

Exemplificatur pro h. 9. ♋ Septemtrionali, ac Orientali: huius verticalis angulus gr. 59. 50. declinatio Muri gr. 25. ſumma gr. 84. 5ò. & Tangens 110. 59'. pro quæſita vmbræ latitudine.

II. Si angulus horæ inuenietur Auſtralis Occidentalis: Tangens ſummæ Complementi declinationis Muri, & Complementi anguli eiuſdem limitabit ſiniſtram latitudinem.

Verbi gratia horæ 20. in ♋, quæ eſt Occidentalis Auſtralis: Complementum declinationis Muri gr. 65. Complementum anguli verticalis gr. 6. 12. aggregatum gr. 71. 12'. Tangens 29. 37.

III. Si horæ angulus erit Occidentalis Septemtrionalis, cum complementum huius anguli verticalis fuerit minus complemēto declinationis Muri, ab hoc illud ſubtrahatur, cum verò maius, è contrà fiat ſubtractio, & quando erit maius Complementum declinationis Muri, ex tangente reſidui proueniet latitudo ſiniſtra, ac quando minus, dextra.

Prò Exemplo quæratur vmbræ latitudo pro h. 23. ♋, ſuppoſita eadem Muri declinatione de Septemtrione ad Occaſum gr. 25. Angulus Verticalis h. 23. gr. 66. 10. Complementum gr. 23. 5ò. Complementum declinationis Muri gr. 65. quod eſt maius, ideò, more ſolito per ſubtractionem differentia gr. 41. 1ò. Tangens 8. 74'.

Quomodò quæcumque Vmbrarum longitudines in ordine ad quæcumque Plana Verticalia ſupputentur.

PVNCTVM LVIII.

PRo inueniendis longitudinibus vmbrarum correſpondentibus cuilibet Plano Verticali, quoniam prius inuenire debes earumdem la-

latitudines per regulas in antecedentibus enucleatas, & ſic cognouiſſe prius arcum, ex quo cognita fuit tangens latitudinis, ideò eiuſdem Arcus ſume Tomologorithmum, deinde cognitæ Altitudinis ☼ ſuprà horizontem per punctum 40. accipe Meſologorithmum, quem adde ſupradicto Tomologorithmo, & habebis Meſologorithmum, cuius tangens erit vmbræ quæſita longitudo.

Pro exemplo ſint quærendæ longitudines Vmbrarum in altitudine poli gr. 44. 29'. pro verticali Plano declinante à Meridie in Occaſum gr. 25.

Primò in horis ♋

Horæ 15. arcus latitudinis	gr. 69. 3'.	Tom.	1044666	Adde
Hora 15. Altitudo ☼	gr. 63. 33.	Meſ.	1030321	
Tangens 56. 23'. ex proximiori		Meſ.	1074987	longitudinis
Hor. 16. arcus latitudinis	gr. 37. 3.	T.	1009794	
Hor. 16. Altitudo ☼	gr. 65. 53.	M.	1034904	
Tangens 27. 98'. ex proximiori		M.	1044698	longitudinis
Hor. 17. arcus latitudinis	gr. 0. 8.	T.	1000000	
Hor. 17. Altitudo ☼	gr. 67. 23.	M.	1038028	
Tangens 24. 0 ò. ex proximiori		M.	1038028	longitudinis
Hor. 18. arcus latitudinis	gr. 27. 50.	T.	1005340	
Hor. 18. Altitudo ☼	gr. 60. 36.	M.	1024913	
Tangens 20. 07'. ex proximiori		M.	1030253	longitudinis
Hor. 19. arcus latitudinis	gr. 45. 50.	T.	1015692	
Hor. 19. Altitudo ☼	gr. 51. 9.	M.	1009396	
Tangens 17. 82'. ex proximiori		M.	1025088	longitudinis
Hor. 20. arcus latitudinis	gr. 58. 48.	T.	1028565	
Hor. 20. Altitudo ☼	gr. 40. 43.	M.	993482	

Tan-

Tangens 16.61'. ex proximiori		M.	1022047	longitudinis
Horæ 21. arcus latitudinis	gr. 69.28.'	T.	1045500	
Hora 21. Altitudo ☼	gr. 30. 2.	M.	976202	
Tangens 56. 23'. ex proximiori		M.	1021702	longitudinis
Hor. 22. arcus latitudinis	gr. 79. 12.	T.	1072727	
Hor. 22. Altitudo ☼	gr. 19.29.	M.	954875	
Tangens 18.89'. ex proximiori		M.	1027602	longitudinis
Hor. 23. arcus latitudinis	gr. 88. 50.	T.	1169121	
Hor 23. Altitudo ☼	gr. 9.22.	M.	921736	
Tangens 81.0.5. ex proximiori		M.	1090857	longitudinis

In horis ♑

Hor. 16. arcus latitudinis	gr. 74.11'.	T.	1056454	
Hor. 16. Altitudo ☼	gr. 5.22.	M.	897285.	
Tangens 3.45'. ex proximiori		M.	953739	longitudinis
Hor. 17. arcus latitudinis	gr. 62.23'.	T.	1033390	
Hor. 17. Altitudo ☼	gr. 12.42.	M.	935288	
Tangens 4. 86'. ex proximiori		M.	968678	longitudinis
Hor. 18. arcus latitudinis	gr. 49. 19.	T.	1018583	
Hor. 18. Altitudo ☼	gr. 18. 13.	M.	951734	
Tangens 5.0.5'. ex proximiori		M.	970317	longitudinis
Hor. 19. arcus latitudinis	gr. 34.52.	T.	1008593	
Hor. 19. Altitudo ☼	gr. 21.22.	M.	959243	

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Tangens 4. 77'. ex proximiori		M.	967836	longitudinis
Hor. 20. arcus latitudinis	gr. 20. 20.	T.	1002794	
Hor. 20. Altitudo ☼	gr. 21. 53.	M.	960386	
Tangens 4. 28. ex proximiori		M.	963180	longitudinis
Hor. 21. arcus latitudinis	gr. 5. 47.	T.	1000222	
Hor. 21. Altitudo ☼	gr. 19. 40.	M.	955315	
Tangens 3. 59'. ex proximiori		M.	955537	longitudinis
Hor. 22. latitndinis	gr 7. 46.	T.	1000400	
Hor. 22. Altitudo ☼	gr. 14. 58.	M.	942704	
Tangens 2. 70. ex proximiori		M.	943104	longitudinis
Hor. 23. aıcus latitudinis	gr. 20. 1.	T.	1002706	
Hor. 23. Altitudo ☼	gr. 8. 14.	M.	916046	
Tangens 1. 54'. ex proximiori		M.	918752	longitudinis

Atque huiuſmodi in alijs, & vbi nos diximus *ex proximiori*, tù poteris, more ſolito, vti parte proportionali, quæ tamen in hiſce ſupputationibus videtur magni laboris, ac nullius vtilitatis, cum ſimiles minutiæ in conſtruendis Schiotericis ferè non diſtinguantur.

Reſtat modo vt addiſcas harum longitudinum denominationes, videlicet an ſint Septemtrionales, aut Auſtrales, pro quo diſtinguendo ſume arcum nocturnum loco ☼ competentem, quem habebis auxilio Tabularum arcuum ſemidiurni, & ſeminocturni, inuenta namque diei quantitate per eoſdem, reliquum ad hor. 24. erit arcus nocturnus, cuius omnes Orientales horæ, quæ minores erunt, habebunt longitudines Septemtrionales, quæ maiores, erunt Auſtrales: verbi gratia ſtante ☼ in principio ♑ arcus eius ſeminocturnus eſt h. 7. 41'. in noſtra poli altitudine g. 44. 29'; duplum huius arcus eſt h. 15. 22'. pro arcu nocturno ☼ in ♑, quarè omnes horæ minores dictis h. 15. 22'.: vt ſunt h. 15. 14. 13. &c. habebunt longitudines Septemtrionales, omneſque horæ maiores, prout h. 16. 17. 18. &c. habebunt longitudines Auſtrales.

De

PVNCTVM LIX.

EXpedimus breuiter hanc Gnomonicæ materiam, non enim noſtrum eſt ex profeſſo tractare, cum tantum finis fuerit demonſtrare per omnia dicenda, quot operationes ex antecedentibus cognitionibus deduci poſſint.

Explicuimus in puncto 42. quid anguli verticales, & methodum ſupputandi ipſos.

Nunc dicitur Vmbram ſecundum Perſpectiuos nihil aliud eſſe, quàm diminutum lumen, aut quandam ſpeciem corporis opaci ſemper luminoſo aduerſam.

Vmbrarum latitudines, de quibus ſupra diſſeruimus ſunt diſtantiæ inter centrum Gnomonis, per quod tranſit verticalis circulus, ac vnumquodque punctum, in quo linea horizontalis ſecatur à Verticalibus tranſeuntibus per Communem ſectionem Arcus Horarij, & Paralleli ☼.

Quarè hæ latitudines ſemper accipiendæ ſunt in Planis perpendicularibus ſuper lineam Horizontalem.

Longitudines Vmbrarum oriuntur ab Altitudinibus ☼, de quibus aliàs dictum fuit, ſemperque ſumendæ ſunt ſuper lineam Verticalem, quæ tranſire debet per punctum, quod oritur in Horologij Plano ex interſectione horarij circuli, & paralleli ☼, & perpendiculariter ſecat lineam Horizontalem.

Suntque dictæ longitudines intercapedo duorum punctorum dictæ lineæ Verticalis, in quibus ſecatur duabus alijs lineis, Horaria, & Horizontali.

Altera methodo ſupputare longitudines Vmbrarum pro Horologijs Horizontalibus.

PVNCTVM LX.

PEr angulos Verticalium cum Meridiano habetur longitudines Vmbrarum, vt demonſtrabitur infrà, vbi de Horologiorum delineationibus tractabimus.

Sed quoniam delineatio Horologij per dictos angulos Verticales fit methodo diuerſa ab alia cæterorum, ideò vt poſſis vti ſemper eadem me-

thodo in talibus delineationibus, de quibus infrà, poteris longitudines Vmbrarum pro Horologijs Horizontalibus etiam alio modo ſequenti inuenire, ſed antea collige diſtantias à Meridiano horarum, cum earumdem Complementis, ſic declinationē Tropici, alteriuſue ſigni, ab Æquatore per punctum 24. & ſic complementum Altitudinis Poli.

Queis præparatis deme à logorthimo Complementi diſtantiæ horæ à Meridiano Meſologorithmum declinationis Tropici, & habebis Meſologorithmum, cuius arcus in ſignis Borealibus detrahendus erit à Complemento Altitudinis poli, ſi diſtantia à Meridiano minor fuerit gr. 90. ſed ſi maior addendus erit eidem Complemento Altitudinis Poli, fietque in vtroque caſu productum cuius Tangens erit quæſita longitudo Horizontalis Horologij.

Pro exemplo debeat inueniri longitudo horæ 9. ♋, in altitudine Poli gr. 44. 29'.

Diſtantia h. 9. à Meridiano	gr. 109. 45'.			
Complementum	gr. 19. 45.	L.	952881.	Subtrahe
Declinatio ♋ initialis	gr. 23. 30.	M.	963830.	
Arcus gr. 37. 51. ex		M.	989051.	

gr. 45. 31. Complementi altitudinis poli, nunc addendi, quia diſtantia h. 9. à Meridiano ſuperat Quadrantem.

Summa gr. 83. 22. quorum tangens exhibet quæſitam h. 9. longitudinem part. 860.

Pro h. 11. cuius diſtantia à Meridiano gr. 79. 45'.

Complementum	gr. 10. 15.	L.	925028.
Declnatio principij, ♋,	gr. 23. 30.	M.	963830.

Arcus gr. 22. 15. nunc ſubducēdus à Complemento M. 961198.

Altitudinis quia diſtantia à Meridiano minor eſt Quadrante, & remanent gr. 23. 16'. quorum Tangens 43. pro quæſita longitudine h. 11.

Pro horis verò parallelorum Auſtralium Complementum arcus addendum eſt Altitudini poli, aggregatumque erit longitudinis quæſita tangens.

Exempli cauſa: quæritur vmbræ longitudo pro h. 18. ♑,

Diſtantia horæ 18. à Meridiano gr. 25. 15.

Complementum	gr. 64. 45.	L.	995639.	Deme
Declinatio initialis ♑,	gr. 23. 30.	M.	963830.	

Ar-

Arcus	gr. 64. 19'.	ex M.	1031809.
Complementum	gr. 25. 41.		
Altitudo poli	gr. 44. 29.		

Summa gr. 70. 10. Quorum Tangens 27.7. pro deſiderata longitudine.

Longitudines horarum omnium ♋ ſunt auſtrales,

Sed longitudines horarum, ♑ ſunt Boreales, ſi Complementum eleuationis poli eſt maius arcu inuento, Auſtrales autem ſi minus.

Eleuationem poli ſuprà planum Verticale declinans inuenire.

PVNCTVM LXI.

HEc poli eleuatio ſuprà planum verticale declinans menſuratur à portione Meridiani Plani inter circulum verticalem eiuſdem, & Meridianum loci.

Meridianus plani, quia vt vnumquodq; Planum proprium Horizontem, ità & Meridianum habet, eſt circulus per polos Mundi, & Plani ductus.

Meridiana Plani dicitur communis ſectio Meridiani proprij cum plano dato.

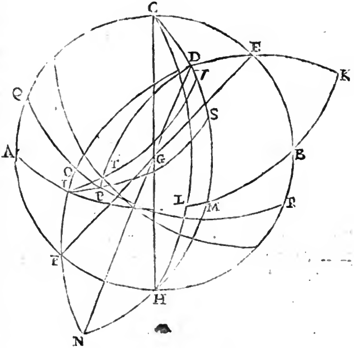
In ſequenti figura pro Meridiano loci intelligatur A H B C. pro Horizonte A L B, ſit verticalis primarius C L H in quo punctum Orientale, aut Occidentale L, Planum Verticale C M H, Horizonti rectum in M, ſed declinans à primario Verticali quantitate anguli L C M, aut arcu L M; quorum Complementa ſunt angulus B C M, & arcus M B; ſint E, & F poli mundi, poluſque Plani I, quarè huiuſce Meridianus erit E D F plano rectus ad D, ſitque G. centrum Mundi, vnde Meridiana loci C G H, ac Meridiana Plani D G N. Axis Mundi E G F, ac eleuatio Poli ſupra planum verticale C D M H, quæ quæritur eſt portio Meridiani, eiuſdem Plani D E, cui diametraliter correſpondet arcus N F, eleuatio alterius poli ſuprà plani faciem auſtralem, ſicuti eleuatio Poli borealis E ſuprà faciem plani Septemtrionalem, & punctum D.

Pro ſupputanda igitur portione Meridiani D E producantur vſque ad quadrantes in K portio Meridiani D E, atque Horizontis M B,

qua-

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quarè habebitur ſphæricum triangulum E K B rectangulum ad B, in quo nota duo crura ſunt, videlicèt BE per altitudinem Poli loci, & BK per declinationem Plani Verticalis, debent enim eſſe æquales, ratione ſtructuræ arcus LM & BK; & per hæc poterit inueniri hypothenuſa EK, cuius cō-



plementum erit quæſita D E, eleuatio poli ſuprà D, nam etiam ratione conſtructionis DK eſt quadrans.

Pro exemplo quæratur eleuatio poli E ſuprà D declinantem à primario Verticali quantitate anguli LCM; ſiuè arcu LM. gr. 25. quantus quoque erit arcus BK, quæraturque in altitudine poli gr. 44.29.

Igitur	BK	gr. 25.	ò.	l. 2.	995728
	EB	gr. 44. 29.		l. 2.	985336
Hypothenuſa	EK	gr. 49. 43.		l. 2.	981064

Cōplementum DE gr. 40. 17. pro eleuatione poli quæſita ſuprà propoſitum Planum.

Sumpto deindè Complemento eiuſdem eleuationis, & tangente per idem Complementum gr. 49. 43'. connotabit ea tangens diſtantiam poli in Vmbra, ſi tamen ſuppoſueris gnomonem tuum diuiſum à decimis, quia aliàs multiplicanda eſſet dicta tangens per numerum, ex

qui-

quibus conſtare gnomon ſupponeretur, & nunc hic ex. gr. diuiſum ſupponimus in partes 12.

Complementum arcus DE gr. 49. 43'. Tangens 1180, quæ multiplicata per 12; dat p. 14. 16. in vmbra qualium Gnomon habet 12.; ac huiuſcemodi in cæteris.

Diſtantiam Meridianæ Plani à Meridiana loci indagare.

PVNCTVM LXII.

IN antecedenti ſchemate Meridiana loci eſt CGH, & Meridiana Plani DGN, eſtque angulus CGD, menſuratus ab arcu CD, quantitas diſtantiæ Meridianæ loci à Meridiana Plani.

Igitur in eodem, de quo ſuprà, triangulo ſphærico rectangulo CDE ex noto crure DE per antecedens, & angulo ECD, qui tantus eſt quantum eſt complementum declinationis Plani verticalis, ſiuè qnantus eſt arcus MB, menſurans eumdem angulum ECD, dictumque fuit etiam in præcedenti, poterit inueniri crus CD diſtantiæ Meridianæ loci à Meridiana Plani; Exempli gratia quæratur diſtantia Meridianæ Plani declinantis gr. 25.

Crus DE	gr. 40. 17'.	M.	992817
Angulus ECD	gr. 65. 0.	M. 2.	966867
Crus CD	gr. 23. 17. ex L.		959684.

Ideò Meridiana Bononiæ diſtabit à Meridiana Plani propoſiti gr. 23. 17.; vt quærebatur.

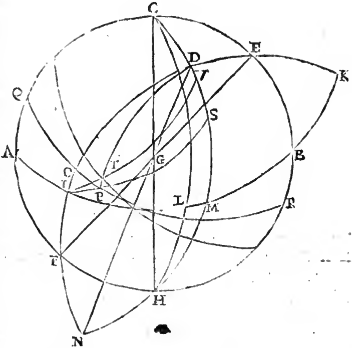
Angulum Meridiani loci, ac Meridiani Plani ſupputare.

PVNCTVM LXIII.

IN ſuperiori eodem ſchemate angulus, qui quæritur Meridiani loci, ac Meridiani Plani eſt angulus CED, rectanguli ſphærici trianguli CDE, in quo cognitum eſt crus CD diſtantiæ Meridianæ loci à Meridiana Plani per antecedens, nec non hypothenuſa CE: per Complementum eleuationis Poli loci, quamobrem poterit ſupputari angulus quæſitus CED.

Exemplum: quæratur Angulus Meridiani Bononiæ cum Meridiano Plani declinantis gr. 25. Crus

quarè habebitur ſphæricum triangulum EKB rectangulum ad B, in quo nota duo crura ſunt, videlicèt BE per altitudinem Poli loci, & BK per declinationem Plani Verticalis, debent enim eſſe æquales, ratione ſtructuræ arcus LM & BK; & per hæc poterit inueniri hypothenuſa EK, cuius cōplementum erit quæſita DE, eleuatio poli ſuprà D, nam etiam ratione conſtructionis DK eſt quadrans.



Pro exemplo quæratur eleuatio poli E ſuprà D declinantem à primario Verticali quantitate anguli LCM; ſiuè arcu LM. gr. 25. quantus quoque erit arcus BK, quæraturque in altitudine poli gr. 44.29.

Igitur	BK	gr. 25. 0.	l. 2.	995728
	EB	gr. 44. 29.	l. 2.	985336
Hypothenuſa	EK	gr. 49. 43.	l. 2.	981064
Cōplementum	DE	gr. 40. 17.		

Cōplementum DE gr. 40. 17. pro eleuatione poli quæſita ſuprà propoſitum Planum.

Sumpto deindè Complemento eiuſdem eleuationis, & tangente per idem Complementum gr. 49. 43'. connotabit ea tangens diſtantiam poli in Vmbra, ſi tamen ſuppoſueris gnomonem tuum diuiſum à decimis, quia aliàs multiplicanda eſſet dicta tangens per numerum, ex

qui-

quibus conſtare gnomon ſupponeretur, & nunc hic ex. gr. diuiſum ſupponimus in partes 12.

Complementum arcus DE gr. 49. 43'. Tangens 1180, quæ multiplicata per 12; dat p. 14. 16. in vmbra qualium Gnomon habet 12.; ac huiuſcemodi in cæteris.

Diſtantiam Meridianæ Plani à Meridiana loci indagare.

PVNCTVM LXII.

IN antecedenti ſchemate Meridiana loci eſt CGH, & Meridiana Plani DGN, eſtque angulus CGD, menſuratus ab arcu CD, quantitas diſtantiæ Meridianæ loci à Meridiana Plani.

Igitur in eodem, de quo ſuprà, triangulo ſphærico rectangulo CDE ex noto crure DE per antecedens, & angulo ECD, qui tantus eſt quantum eſt complementum declinationis Plani verticalis, ſiuè qnantus eſt arcus MB, menſurans eumdem angulum ECD, dictumque fuit etiam in præcedenti, poterit inueniri crus CD diſtantiæ Meridianæ loci à Meridiana Plani; Exempli gratia quæratur diſtantia Meridianæ Plani declinantis gr. 25.

Crus DE	gr. 40. 17'.	M.	992817
Angulus ECD	gr. 65. o.	M. 2.	966867
Crus CD	gr. 23. 17. ex L.		959684.

Ideò Meridiana Bononiæ diſtabità Meridiana Plani propoſiti gr. 23. 17.; vt quærebatur.

Angulum Meridiani loci, ac Meridiani Plani ſupputare.

PVNCTVM LXIII.

IN ſuperiori eodem ſchemate angulus, qui quæritur Meridiani loci, ac Meridiani Plani eſt angulus CED, rectanguli ſphærici trianguli CDE, in quo cognitum eſt crus CD diſtantiæ Meridianæ loci à Meridiana Plani per antecedens, nec non hypothenuſa CE: per Complementum eleuationis Poli loci, quamobrem poterit ſupputari angulus quæſitus CED.

Exemplum: quæratur Angulus Meridiani Bononiæ cum Meridiano Plani declinantis gr. 25.

Crus

Crus CD.	gr. 23. 17'.	L.	959684
Hypothenuſa CE.	gr. 45. 31.	T. 2.	1014663

Angulus CED. gr. 33. 38. ex L. 974347.; itaquè quæſitus angulus Meridiani Plani huius, ac Meridiani Bononiæ erit gr. 33. 300.

Momentum quo ſit Vmbra breuior in Planis Verticalibus cognoſcere.

PVNCTVM LXIV.

IN Planis Horizontalibus vmbra Meridiana breuior eſt cæteris omnibus eiuſdem diei, cum in Meridie eorumdem ☉ ferat maiores Altitudines.

At in Planis Verticalibus vmbra breuior contingit extrà tempus verum Meridiei; non enim, prout ex antecedentibus, coincidunt Meridianus Plani, ac loci:

Igitur verò tempori Meridiei adde angulum Meridiani Plani, ac Meridiani loci, reductum in horas, & minuta per punctum 25., ſi declinatio Plani fuerit in Occaſum, aut ſubtrahe ſi fuerit in Ortum, & habebis tempus, quo fiet vmbra breuior in Plano verticali.

Exempli gratia quæratur hoc tempus Vmbræ breuioris in Plano Verticali declinante in Occaſum gr. 25. ſub altitudine poli gr. 44. min. 29. extante ☉ in ♑ principio.

Arcus ſeminocturnus ♑ polo gr. 44. min. 29.	h. 4. 19'.
Horæ	24.
Tempus verum Meridiei.	h. 19. 41.
Angulus Meridiani ſupradicti Plani, & Meridiani Bononiæ per antecedens gr. 33. 38'; & in horis	Adde h. 2. 14 32'',
Tempus vmbræ breuioris in ſupradicto Plano	h. 21. 55. 32.

Inſuper idem quæratur ſub altitudine Poli gr. 45. pro verticali Plano declinante in ortum gr. 30. ☉ in ♑

Arcus ſeminocturnus ☉ in ♑ polo gr. 45.	h. 4. 17'
	Horæ 24.
Tempus verum Meridiei	h. 19. 43.

Angu-

Angulus Meridiani Plani, ac loci	Deme
gr. 39. 14. qui importat	h. 2. 36. 56″.
Tempus vmbræ breuioris in hoc Plano	h. 17. 6. 4.

Diſtantias ☼ à Meridiano Plani Verticalis ad quodlibet temporis momentum numerare.

PVNCTVM LXV.

SVpputa tempus breuioris vmbræ in Plano Verticali per antecedens, quod confer, ſubtrahendo minus à maiori, cum momento temporis quo quæris diſtantiam ☼ à Meridiano Plani Verticalis, nam habebis à reſſiduo ☼ à Meridiano Plani diſtantiam, reducendam in gradus &c. per punctum 25.

Pro exemplo: optetur diſtantia ☼ à Meridiano Plani Verticalis declinantis in Occaſum gr. 25. in altitudine poli gr. 44. m. 29. pro h. 18. ☼, in ♎.

Per antecedens inuentum fuit tempus vmbræ breuioris in hoc Plano propoſito h. 21. 55′. 32″.
h. 18. Deme

Reſiduum h. 3. 55. 32. Quod in gradus, & min. facit gr. 58. 53′. pro quæſita diſtantia h. 18. ☼, in ♎.

Altitudines ☼ ſuper quodlibet perpendiculare Planum declinans, ad ſingula momenta, & quaslibet polorum eleuationes ſupputare.

PVNCTVM LXVI.

SI momentum temporis, quo venaris Altitudinem ☼ ſuper planum perpendiculare, aut verticale nullam, ex antecedenti, habuerit à Meridiano diſtantiam, fueritque ☼, eodem momento temporis in altero æquinoctialium ſignorum, ſubtrahe à quadrante quantitatem eleuationis poli ſupra verticale planum, & à reliquo habebis Altitudinem quæſitam: Ex. gra. Calculanda ſit Altitudo ☼ h. 20. 54′. 32″. Italica, ſuper planum verticale declinans in Occaſum gr. 25., ac eleuatione poli

Bononiæ ☉ in ♈, vel ♎.

Quoniam momento temporis h. 20. 14'. 32''. ☉ in æquinoctio nullam habet diſtantiam à Meridiano Plani, ideò in Superiori diagrammate, dempto à gr. 90. arcu DE, per punctum præcedens 61. inuento gr. 40. 17'. remanebit Complementum DO, gr. 49. 43'. Altitudinis quæſitæ Æquinoctialis in O.

At extante quoque ☉, in ſigno Æquinoctiali, & cùm diſtantia à Meridiano Plani Verticalis, ducatur in ſuperiori ſyſtemate portio circuli declinationis DP, à D, polo Plani, ad P Æquatorem, quæ faciat angulum ODP, cùm Meridiano Plani pro quantitate diſtantiæ habitæ à Meridiano, vndè erit ſphæricum ttriangulum OPD, rectangulum ad P, in quo, ex nota hypothenuſa OD, Complemento ſcilicèt eleuationis Poli E, ſupra D, nec non & angulo ODP, diſtantiæ ☉ à Meridiano Plani ſupputabuntur crura OP, & PD.

Hiſce notis deſcribatur portio verticalis circuli IPS, habebiturque etiam Sphæricum triangulum DPS, rectangulum ad S, in quo ex nota hypothenuſa CP, per antecedentem ſupputationem, anguloque PDS, per Complementum etiam inuenti cruris OP, ſupputabitur crus PS, Altitudinis quæſitæ.

Exempli cauſa: quæratur Altitudo ☉ hor. 20. æquinoctialis ſuprà Planum verticale declinans gr. 25. in Occaſum, eleuatione poli Bononiæ gr. 44. 29'.

Arcus ſemidiurnus ☉, in æquinoctio	h. 6. 0.
	H. 24.
Tempus verum Meridiei in æquinoctio,	H. 18. 0.
Angulus Meridiani Plani, & Bononiæ,	H. 2. 14. 32'.
Tempus vmbræ breuioris in Plano	h. 20. 14. 32.
	H. 20.
Diſtantia horæ 20. ab hoc Meridiano,	h. 0. 14. 32.

quæ in gradus, &c. importat gr. 3. 38'.
Crus DE, gr. 40. 17'.
Igitur DO, gr. 49. 43.

In

In triangulo ſphærico rectangulo ODP,

Crus DO,	gr. 49. 43'. L.	988244.	M 2.	992817.
Angulus ODP,	gr. 3. 38. L.	880189.	T.	1000087.
Crus OP,	gr. 2. 46'. ex L.	868433.	M 2.	992904.
Quadrans	gr. 90.			Crus DP, gr. 49. 39.
Angulus PCS,	gr. 87. 14.			

In triangulo ſphærico rectangulo DPS.

Crus CP,	gr. 49. 39'. L.	988201.
Angulus PDS,	gr. 87. 14. L.	999949.
Altitudo quæſita PS,	ex L.	988150. gr. 49. 34'.

Sit etiam aliud exemplum h. 15. pro eodem verticali Plano.

Crus DO	gr. 49. 43'. l. 988244.	M. 2.	993817.
Angulus ODP	gr. 78. 38. l. 999140.	T.	1070534.
Crus OP	gr. 48. 25. l. 987384.	M. 2.	1063351.
Quadrans	gr. 90.		Crus DP gr. 13. 5.
Angulus PDS	gr. 41. 35.		

Angulus PDS gr. 41. 35.

In altero triangulo PDS.

Crus DP	gr. 13. 5. l. 935481.	
Angulus PDS	gr. 41. 35. l. 982198.	
Altitudo quæſita PS	ex l. 917679.	gr. 8. 38'.

Si autem ☉ fuerit extra Æquinoctia, nullamque habuerit à Meridiano plani diſtantiam, complemento eleuationis poli ſuprà Planum adde maximam obliquitatem eclipticæ ſi ☉ fuerit in ſigno Auſtrali, vel ab eodem ſubtrahe ſi fuerit in Boreali, & proueniet vtroque caſu Altitudo quæſita.

Verſante denique ☉ extra æquinoctia, Planique Verticalis Meridianum, eadem methodo, de quà ſupra ſupputabuntur crura OP, ac PD, huicq; PD portioni circuli declinationis addetur maxima ☉ declinatio, ſi ☉ habeatur in ſigno meridionali, & ab ea ſubtrahetur ſi fuerit in Septemtrionali, elicietur enim ab vtroque facto quantitas circuli declinationis, cum qua, & complemento cruris OP habebitur Altitudo quæſita.

Optetur, vt etiam factum fuit ſupra, pro Altitudinibus ☉ Æquinoctialibus, altitudo ☉ in ♑ hor. 21. & loquemur ſemper de horis Italicis ſuper Planum declinans in Occaſum gr. 25. & Bononiæ latitudine gr. 44. 29'.

Inuentum fuit ſupra tempus Vmbræ breuioris in hoc Plano h. 22. 55'. 32'', quare diſtantia hor. 21. à Meridiano huius Plani gr. 13. 53'; vnde erit forma calculi, vt ſequitur.

49. 43'.	l. 988244.	M. 2.	992817.		
13. 53.	l. 938011.	T.	1001288.		
10. 33. ex	l. 926255.	M. 2.	994105.		
90.			48. 53'.		
79. 27.	Maxima ☉ obliquitas		gr. 23. 30.		
			gr. 72. 23.	l. 997914.	
			79. 27.	l. 999290.	
Altitudo quæſita gr. 69. 33'. ex				l. 997174.	

Inſuper pro eodem Plano verticali quæratur altitudo ☉ in ♋ hor. 16.

Arcus ſemidiurnus ☉ in ♋ initio	h. 7. 41.
	h. 24.
Verum tempus Meridiei ☉ in ♋,	h. 16. 19.
Angulus Meridiani Plani, ac Meridiani Bononiæ	h. 2. 14. 32''.
Tempuſq; Vmbræ breuioris in hoc Plano ☉ in ♋	h. 18. 33. 32.
Propoſita	h. 16.
Diſtantia huius h. 16. à Meridiano Plani	h. 2. 33. 32.
hæcque diſtantia in gradus &c. eſt	38. 23'.

Quamobrem in triangulo OPD

Crus OD	gr. 49. 43.	l. 988244.	M. 2.	992817.
Angulus ODP	gr. 38. 23.	l. 979304.	T.	1010575.
Crus OP	gr. 28. 16. ex	l. 967548.	M. 2.	1003392.
Quadrans	gr. 90.		Crus DP	gr. 42. 46'.
				Subtrahe
Angulus TDV	gr. 61. 44.	Max. ☉ declinatio		gr. 23. 30.
		Remanet crus DT		gr. 19. 16.

In

In Triangulo DTV.

Crus DT	gr. 19. 16.	l. 951847.
Angulus TDV	gr. 61. 44.	l. 994485.
Crus TV Altitudo quæſita		ex l. 946332. gr. 16. 54.

Altitudines quaslibet Solis ſuper quamlibet Verticalem ſuperficiem exactè reſpicientem Meridiem, vel Septemtrionem, Ortum, aut Occaſum ſupputare.

PVNCTVM LXVII.

SI verticalis ſuperficies exactè Meridiem reſpiciat, ſupputa Altitudines ☉ prout edoctum fuit ſuper horizontalia plana ſuprà puncto 40.; hoc vno tantum diſpari, quod in ſupputatione Altitudinum pro horis Signorum Auſtralium, debes eas conſiderare in reſpectu declinationis tamquam Septemtrionalia, atquè hæc tamquam Auſtralia, præeminent enim in hanc ſuperficiem ſigna Meridionalia.

Pro exemplo quæratur Altitudo hor 17. ☉ in ♑ pro hac ſuperficie Meridiem adæquatè reſpiciente in eleuatione poli gr. 44. m. 29.

Arcus ſeminocturnus ☉ in ♑ eſt	h. 4. 19'.
	h. 24.
Verum tempus Meridiei	h. 19. 41.

Vndè diſtantia propoſitæ h. 17. à Meridiano h. 2. 41'. ſiue gr. 40. 15. quarè erit calculus vt infrà, facta reductione obliquanguli ſphærici trianguli in triangula rectangula.

Angulus verticalis	gr. 40. 15'.	T. 1011734.	
Crus minus	gr. 45. 31.	M. 2. 999217.	l. 2. 984553.
Crus à perpendiculo	gr. 37. 51.	M. 2. 1010951.	T. 1010258.
Crus maius	gr. 66. 30.		
Crus aliud à perpendiculo	gr. 28. 39.		l. 2. 994328.
Diſtantia à Vertice	gr. 38. 51.		ex l. 2. 989139.

Huiuſque complementum gr. 51. 9. Altitudo quæſita.

Ac ſi diligenter notaueris horarum correſpondentias in vtroque Tropico, abſquè aliqua alia ſupputatione poteris vti Altitudinibus ſupputa-

tis

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tis pro Planis horizontalibus, correſpondet namquè h. 18. ♋ Altitudo in Plano horizontali pariter cum hor. 18. ♑ plani verticalis exactè Meridiem reſpicientes: ſic correſpondent h. 17. & 19., h. 16. & 20., h. 15. & 21.; h. 14. & 22.; h. 13. & 23.; h. 12. & 24. &c. quoniam hæ horæ in reſpectu ad Planum horizontale, ac Planum completè Meridionale æquales à Meridiano diſtantias habent.

In ſuperficie verò verticali exactè Septemtrionem intuente Altitudines calculari debent prout factum fuit pro Planis Horizontalibus ſupra eodem puncto 40.

At ſi lateralis ſuperficies ad vnguem vel Ortum, aut Occaſum aſpiciat, ſumatur diſtantia à Meridiano Plani prout ex ſuperiori puncto, qua obtenta, coniungatur ſemper logorithmus competens complemento obtentæ diſtantiæ à Meridiano cum complementi maximæ declinationis ☉ logorithmo, fietque logorithmus Altitudinis quæſitæ.

Hicque animaduertatur, prout etiam ex fundamentis ſuprà iactis optimè colligi poteſt, quod angulus Meridiani horum Planorum exactè Ortum, vel Occaſum aſpicientium ſemper eſt hor. 6.; & gr. 90.

Quæratur Altitudo h. 15. ſupra Planum verticale Ortum preciſè aſpiciens in eleuatione poli gr. 44. min. 29. ☉ in ♑.

Tempus Meridiei veri ☉ in ♑.	h. 19. 41'.	
Subtrahe nunc, quia Planum reſpicit Ortum	h. 6.	
Tempus Vmbræ breuioris in Plano	h. 13. 41.	
Propoſita	h. 15.	
Diſtantia h. 15. ab hoc Meridiano	h. 1. 19. quæ in gr. &c.	
importat gr. 19. 45. complementum	gr. 70. 15.	l. 997367.
Complemẽtum maximum declinationis ☉	gr. 66. 30.	l. 996240.
Altitudo quæſita gr. 59. 40.		ex l. 993607.
Inſuper pro h. 16.		
Diſtantia hor. 16. ab hoc Meridiano	gr. 34. 45'.	
Complementum	gr. 55. 15.	l. 991469.
Complementum maximæ declinationis ☉	gr. 66. 30.	l. 996240.
Altitudo quæſita gr. 48. 54'.		ex l. 987709.

Si verò quærerentur Altitudines iſtæ extante ☉ in ſigno Æquinoctiali nullus calculus laborem præſtabit, quoniam complementum diſtantiæ à Meridiano porriget optatam Altitudinem.

Ar-

Arcus horizontales horarum pro quibuslibet Planis Verticalibus declinantibus, ſiuè non ad quaslibet Polorum eleuationes perſcrutari.

PVNCTVM LXVIII.

IN ſuperiori punƈto 42. demonſtrauimus methodum inueniēdi angulos Verticales horarum, ac Meridiani pro Planis Horizontalibus, quì anguli per arcus Horizontales menſurantur, & inſeruiunt ad determinandas longitudines linearum horariarum, vt apparebit infrà dum exēplificabimus pro Solaribus Horologijs.

Reſtat modo eoſdem arcus Horizontales exponere pro Planis quibuslibet verticalibus declinantibus, ſiue non ad quaslibet Polorum eleuationes.

Igitur, attentis præmiſſis, & quæ docuimus in eodem punƈto 42. pro inueniendis hiſce arcubus horizontalibus gratià verticalium Planorum, habes tria cognita, videlicet diſtantiam horæ à Meridiano Plani per punƈtum 65. Altitudines ☼ ſuper hæc Plana per antecedentia, nec non & complementum maximæ declinationis ☼ diſtantiamque à Vertice per complementum inuentæ Altitudinis ☼, quarè pro omnibus hiſce Planis ſiuè declinantibus, aut non ad quaslibet polorum eleuationes, poteris optatos horizontales arcus ſupputare, & adaptare Plano verticali, ſi quātitati eorumdem addideris ſuprà inuentam diſtantiam Meridianæ Plani à Meridiana loci, dum Planum verticale declinet in Ortum, & ſubtrahendo minorem à maiori, ſi declinet in Occaſum:

Exemplis res omninò clarior fiet. Quæratur arcus horizontalis pro h. 21. & ♑, plano declinante in Occaſum gr. 25. in altitudine poli grad. 44. 29.

Diſtantia h. 21. à Meridiano Plani per punƈtū *66*.	g. 13.53'. l.	*948011*.
Altitudo gr. *69*. 33'. vndè diſtantia à Vertice	g. 20.21. T. 2.	104*5669*.
Complementum maximæ declinationis ☼	g. *66*.30. l.	*996240*.
Competunt gr. 39. 2'.	l.	*979920*.

Diſtantia Meridianæ huius Plani à Meridiana Bononiæ per punƈtum 62. gr. 23. 17. — Subtrahe, quia declinat (in Occaſum

Arcus horizōtalis quæſitus gr. 15. 45.

In-

Inſuper eiuſdem verticalis Plani cauſa quæratur Arcus horizontalis pro h. 16. ☉.

Diſtantia h. 16. à dicto Meridiano	gr. 38. 23'. l.	979304.
Altitudo gr. 16. 54'.		
Diſtantia à vertice	gr. 73. 6. T 2.	10001917.
Supplementum ex maxima declinatione ☼	gr. 66 30. l.	996240.
Conueniunt	gr. 36. 31. l.	977461.
Diſtantia Meridianæ huius Plani à Meridiana Bononiæ	gr. 23. 17.	
Arcus horizontalis quæſitus	gr. 13. 14.	

Faciliùs pro hor. æquinoctialibus.

Exemplum in h. 20. pro eodem Plano verticali.

Diſtantia à Meridiano h. 20.	gr. 3. 38. l. 880189.	(Subtrahe)
Diſtantia à vertice	gr. 40. 26. l. 981195.	
Competunt	gr. 5. 36. l. 898994.	
Diſtantia Meridianarum	gr. 23. 17.	
Arcus horizontalis quæſitus	gr. 17. 41.	

Hos arcus horizontales conſueuerunt Gnomonici reducere ad ordinatam proportionem totius circuli gr. 360. itaut hi gr. 360. terram aſpiciant pro horologio Verticalis Plani Meridionalis, pro horologio autem gratiâ verticalis Plani Aquilonaris, ſiuè Septemtrionalis, omninò contrario modo, ideſt gr. 360. ſuperiorem partem habeant, cœlumque reſpiciant procedendo gradus dexteram verſus operantis, ac pro Meridionali verſus ſiniſtram; at mihi placuit addere oportunas denominationes proùt in ſequentibus, ne confuſio aliqua ſtudioſum Candidatum inuadat.

Concluſio, & de altera methodo inueniendi latitudines, ac longitudines linearum horariarum pro quibuslibet Planis Verticalibus.

PVNCTVM LXIX.

COgnitis Altitudinibus ☼ ſuper hæc verticalia Plana, facilè tibi erit altera methodo ſupputare latitudines Vmbrarum per antecedens punctum 48.

Sed

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Sed ſi Gnomonem tuum ferre intendes aliam proportionem, quàm Decimarum, vt puta 12. ac huiuſmodi: ſumpta tangens per Complementum Altitudinis multiplicetur per numerum Gnomonis, & in producto, facta numerorum diſtinctione, prout etiam in antecedentibus habebitur Vmbræ latitudo quæſita; verbi gratia

In ſuprà allatis exemplis Altitudo h. 20. æquinoctialis inuenta fuit gr. 49. 34. cuius Complementum gr. 40. 26. huius Tangens 852. quæ multiplicata per 12. partes Gnomonis ex ſuppoſito dat Vmbræ latitudinem pro dicta h. 20. p. 10. 22'.

Pro h. 21. ♎, eius diſtantia à Vertice eſt grad. 20. 27. Tangens 373. quæ multiplicata per 12. dat quæſitam Vmbræ latitudinem p. 4 47. 6''. ſed 4. 48'.

Ac huiuſcemodi in cęteris quibuſcumque, animaduertendo, etſi inter hunc modum, & præcedētem ſupputandi latitudines Vmbrarum inueniatur differentia, quod hæc non eſt per erratum, quia methodus vtraque ſuam ſequitur proportionem.

Longitudinnes verò præſtabuntur ab arcubus horizontalibus ſuprà inuentis, & qui inſeruient Horologiorum delineationibus, prout ſuo loco in ſequentibus exponetur.

Hæcque pro Verticalibus Horologijs Plano Horizontali rectis ſufficiant.

Dati Plani ſimpliciter inclinati Meridianæ diſtantiam à Meridiana loci, & eleuationem poli ſuprà idem Planum inuenire.

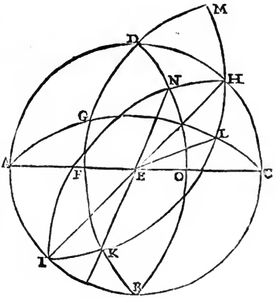
PVNCTVM LXX.

Plana ea dicuntùr ſimpliciter inclinata, quæ ad Meridianum, & Horizontem obliqua ſunt, ſed ad Verticalem primarium recta.

In ſchemate ſequenti ſit Meridianus loci ABCD, Horizon AEC, Verticalis Primarius BFD, Planum inclinatum AGC, quātitate arcus DG, angulis ad G rectis, poli Mundi HI, Polus plani huius K, vndè eius Meridianus HKI, eleuatio poli H ſuprà planum arcus HL, diſtantiaq; Meridianæ Plani EL, à Meridiana loci quantitas arcus LC, qui duo arcus modò quæruntur, & ſupputantur continuatis portionibus circulorum FGD, & KLH, vſque ad quadrantem in M.

Quia in ſphęrico triangulo DMH rectangulo ad D nota ſunt duo crura DH Complementum Altitudinis Poli, ac DM Complementum

inclinationis Plani A G C, facti namquè ſunt quadrantes SM, & LM, facilimè poterit inueniri hypothenuſa MH, cuius Complementum H L erit eleuatio poli ſuprà Planum ſimpliciter inclinatum, quæ quærebatur.



Deindè in triangulo HLC rectangulo ad L, ex cognito crure HL, & angulo HCL, inclinationis Plani tanto quantus eſt arcus D G, poterit etiam facilimè noſci crus LC, diſtantiæ Meridianæ Plani à Meridiana loci quæſita.

Omnia per ſe clara ſunt, ideò exemplis non indigent.

Si verò Planum inclinatum ſit etiam declinans, eleuationem Poli ſupra idem Planum, diſtantiam Meridianæ loci à Meridiana eiuſdem Plani, nec non & angulos Meridiani loci perſcrutari.

PVNCTVM LXXI.

VAſtiſſima eſt hęc, propter caſuum diuerſitatem materia; principaliora tamen attingemus.

Intelligatur etiam in antecedenti figura pro Plano inclinato, & declinante DNB, cuius Meridianus HNI, arcus inclinationis DN, & declinationis arcus FO, ſiuè angulus FDO.

Quamobrem in ſphærico triangulo DNH. rectangulo ad N, in quo cognitum eſt crus DN. per inclinationem Plani, quam nunc hic ſuppona-

namus eſſe gr. 23. 51; nec non & adiacens angulus NDH, per complemẽtum declinationis eiuſdem Plani, quod etiam modò hìc ſupponemus declinare gr. 50; vnde complementum gr. 40, inuenientur reliqua incognita eiuſdem trianguli.

Atque ante omnia ſupputabitur quantitas hypothenuſæ DH, quæ etſi videatur intuitu primo eſſe quantitas Complementi eleuationis poli loci, nihiloſecius non ſic eſſe ſemper poteſt ratione correſpectiuitatis, quam habet eadem hypothenuſa DH, ad diuerſas Planorum inclinatorum inclinationes, ac diuerſas declinationes, & in figura dilucidè omnia deſcribi non valent, ſtudioſo tamen Candidato difficilia non erunt.

Dicebamq; ante omnia ſupputandam eſſe hypothenuſam DH, quãtitatis eleuationis poli, aut Axis ſuprà Planum inclinatum declinans, quia, ſtante ipſa in æquali quantitate, maiori, aut minori, cum verò complementò eleuationis poli loci, tres venient diſtincti caſus:

Et primus ideò caſus eſt, ſi hypothenuſa DH fuerit æqualis complemento eleuationis poli loci, ſignum erit hoc Planum ſub Meridiano obliquè vſque ad polum futurum eſſe inclinatum, quo in caſu Meridiana Plani, & loci, itemque axis HI ad eamdem lineam concurrent, ſi planum in ipſo circulo maximo HN conſiſtere fingatur. At ſi Planum non in eodem circulo maximo, ſed in aliquo ipſius parallelo conſiſtere fingatur, & Axis à Plano nonnihil abducatur, vt neceſſariò fit cum Sciotericum abſoluere libeat, Meridianæ Plani, & loci ſunt duæ lineæ inter ſe parallelæ, & ſeiunguntur mutuo ſecundum differentiam longitudinis loci, & Plani, quæ differentia conſtituitur ab angulo CHN, qui eſt Cõplementum anguli DHN, cuius demonſtrationem ob breuitatem ommittimus, & iam fecimus Meridianum Plani ductum per ſuos Polos.

Secundus caſus eſt ſi DH inuentus fuerit maior Complemento eleuationis poli loci, tunc enim indicium erit planum vltrà Polum boreum inclinatum eſſe, ideoque polum arcticum ſuprà tale Planum extolli debere,

Tertius caſus erit denique ſi DH reperietur minor Complemento eleuationis poli loci, nam tunc quoquè cognitum erit conſiſtere Planum citrà polum articum, ideoquè ſupra tale planum non Polum boreum H, ſed Auſtralem I, extolli debere.

Pro exemplo ſit arcus DN inclinatio Plani gr. 23. 51; angulus NDH, vt ſupra, gr. 40. vndè reperietur DH, vt ſequitur.

Crus DN.	gr. 23. 51'.	M. 2.	1035448.
Angulus HDN,	gr. 30. 0.	L. 2.	988425.
			————

Hy-

Hypothenuſa DH, gr. 29. 59. M. 2. 1023873. Complemento

aſſumptæ eleuationis poli gr. 44. 29. minor gr. 15. 32'. indicatq; eleuationem poli ſupra aſſumptum Planum eſſe gr. 29. 59.

Pro habenda NH diſtantia Meridianæ Plani à Meridiana loci

Crus DN,	gr. 23. 51'.	l. 960675.
Angulus HDN,	gr. 40. 0.	M. 992381.
NH	gr. 18. 44. cx	M. 953056.

Gratià cognitionis anguli DHN.

Crus DN	gr. 23. 51.	l. 2. 996123.
Angulus HDN	gr. 40. 0.	l. 980807.
Angulus DHN,	gr. 54. 0.	l. 976930.

Complementum gr. 36. differentia longitudinis Plani à longitudine loci, ſiue diſtantia Meridiani loci, ac Meridiani Plani.

Diſtantiam à Meridiano horum planorum inclinatorum, & declinantium, necnon longitudines, ac latitudines Vmbrarum exhibere.

PVNCTVM LXXII.

SI Planum inclinatum declinauerit in Ortum, ſubtrahe à vero tempore Meridiei angulum factum à Meridiano loci, & Meridiano Plani, adde autem ſi declinauerit in Occaſum, fietq; vt in antecedentibus quoque momentum Vmbræ breuioris in Plano, & vt etiam in eiſdem colligetur horarum à Meridiano Plani diſtantia.

Pariter ex altitudinibus Vmbrarum latitudines, ac longitudines auxilio arcuum Horizontalium, de quibus etiam in ſuperioribus ſermonem habuimus colligi poterunt, & ſic omnia expediri, quæ ad integram ſuper hæc Plana Horologiorum conſtructionem ſunt neceſſaria.

De Amplitudine Ortiua, atque Occidua.

PVNCTVM LXXIII.

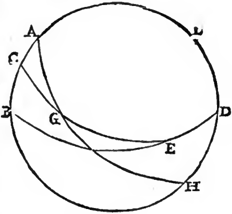
IN aſſignandis ſuprà Horizontis muneribus diximus in eo menſurari Amplitudinem ortiuam, atque Occiduam, & merito; nihil aliud enim

eſt

eſt hæc amplitudo, vel latitudo Ortiua, & Occidua niſi arcus quidam Horizontis inteceptus inter Verticale, quod tranſit per centrum ☼ cum oritur, vel occidit, & primiarum Verticale.

At in Gnomonica hæc ortiua, aut occidua latitudo eſt arcus comprehenſus inter punctum veri Ortus, & Occaſus ☼, ac Sectionem in Horizonte circuli horarij tranſeuntis per centrum ☼, appellaturque etiam arcus Horizontalis, prout interceptus à Verticali, quod tranſit per locum Gnomonis, eoque, quod ſecat Horizontem in puncto ſectionis, vel tactus ab eo parallelo in quo ſi ☼ moraretur, orirètur illa hora.

In ſequenti figura intelligatur pro Meridiano ABCHD; pro Horizonte BED, Æquatore AFH. poſito ☼ in G, circuloque horario CGE ſecante Horizontem in E, quia tunc ☼ orirètur in F, erit amplitudo quæſita FE, inter poſita à vero Ortu ☼ in F, atque ſectione circuli horarij CGE in E portione Horizontis BD.



Pro noſcendo hoc arcu FE, cōſiderabitur ſphæricum triangulum FGE rectangulum in G in quo notum eſt crus FG per diſtantiam horæ à Meridiano anguluſq; GFE per Quadrantem, ac Altitudinem Poli L, quia cum ab L, ad A ſit ſemper quadrans, addito ipſi DL proueniet DA, quadrans ſcilicet quantitas altitudinis Poli, quare inueniri poterit hypothenuſa FE addendo ob maiorem facilitatem Meſologorithmum diſtantiæ horæ à Meridiano cum logorithmo Altitudinis poli, nam fiet Meſologorihmus ſecundus hypothenuſæ quæſitę FE.

Pro habenda horæ diſtantia à Meridiano hic abſque aliqua recta ☼ Aſcenſione cuilibet horæ aſſignentur gr. 15. Æquator enim ab horarijs circulis diuiditur in partes æquales, productique ſumatur dimidium, cuius Meſologrithmus accipiendus erit, & addendus, vt ſupra.

Exempli gratia quærendus ſit arcus horizontalis pro horâ nonâ Italica ad eleuationem poli gr. 44. 29'.

Hor. 9. competunt gr. 135. facta multiplicatione 9. per 15. vt ſupra

Di-

Dimidium gr. 135.	gr. 67. 30.	M.	1038278.	Adde
Altitudo poli	gr. 44. 29.	L.	984553.	
Hypothenuſa FE	gr. 30. 25.	ex M.2.	1022831.	
Pro hor. 10. dantur	gr. 150.			
Dimidium	gr. 75.	M.	1057195.	
Altitudo poli	gr. 44. 29.	L.	984553.	
Hypothenuſa FE.	gr. 20. 56'.	ex M.2.	1041748.	

Ac hiuſmodi in alijs, quare arcus horizontales ſequentium

Hor. 11.	gr. 10. 38'.		
12.	gr. 0. 0.	Hor.	
13.	gr. 10. 38	11.	
14.	gr. 20. 56.	10.	
15.	gr. 30. 25.	9.	
16.	gr. 39. 29.	8.	
17.	gr. 47. 36.	7.	
18.	gr. 54. 59.	6.	
19.	gr. 61. 44.	5.	
20.	gr. 67. 58.	4.	
21.	gr. 73. 49.	3.	
22.	gr. 79. 22.	2.	
23.	gr. 84. 44.	1.	
24.	gr. 90. 0.	0.	

Harum horarum ab Occaſu, prima vſque ad duodecimam ſunt Septemtrionales, duodecima vſque ad vigeſimam quartam ſunt Auſtrales, omnes vero ſunt Orientales, cuius notitia inſeruiet pro operationibus ſequentibus.

At pro inueniendis hiſce arcubus horizontalibus pro Muris horizonti perpendicularibus, inuentis prius arcubus antecedentibus horizontalibus, eorumque complementis, quæ & fungentur in ſubſidium Officio circumferentiarum Horizontalium, conſiderat âque etiam prius habitudine Muri, & an declinet, nec ne, prout etiam ex ſuperioribus, animaduertes quoque regulas, quas præpoſuimus pro inueniendis vmbrarum latitudinibus ſecũdum quaslibet deſcriptas Murorum habitudines, nam huiuſcemodi etiam arcus horizontales pro quibuslibet Planis verticalibus, eorumdemque arcuum quantitates nanc ſci poteris: non vteris tamen vnquam arcu horizontali, ſed ſemper eius complemento. Pro exemplo: inquirenda ſit latitudo pro inuenie ndo puncto h. 16. ſupra lineam Horizontalem in Muro declinante à Meridie ad Occaſum gr. 25. in ſemper aſſumenda poli Altitudine gr. 44. 29'. Quære ergo regulas inueniendi vmbrarum latitudines in Muro declinante à Meridie in Oc-

ca-

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caſum per punctum 55.60. cum ſequentibus. Hiſce inuentis, quoniam prout ſupra h. 16. habet gr. 39. 29'. arcus Horizontalis, complementique gr. 50. 31. eſtque Orientale, & Auſtrale, ideo per regulam primam dicti puncti addes Complemento dicti arcus horizontalis declinationem Muri, habebiſque quæſitam latitudinem horizontalem ſiniſtram.

Et quamquam in ſupradictis Regulis non dicatur ſumendum eſſe cõplementum circumferentiæ horizontalis, ſed ipſam circumferentiam horizontalem, in omni tamen caſu, vbi in dictis regulis locuti ſumus de circumferentia horizontali, & non de eius Complemento, vt applices dictas regulas pro reperiendis quantitatibus harum ortiuarum latitudinum, ſemper vteris Complemento arcuum horizontalium, & vbi diximus de Complemento horizontalis circumferentiæ, ſemper adhibebis pro regularum applicatione ipſos arcus horizontales, & non eorum cõplementa.

Hora igitur 16. habet gr. 39. 29'. arcus horizontalis, Complementiq; gr. 50. 31. addendo huic gr. 25. declinationis Muri fiunt gr. 75. 31'. quorum pro optata latitudine Ortiua ſiniſtra eſt Tangens 38.71.

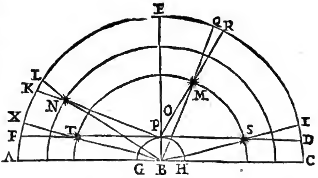
Pro h. 15. arcus horizontalis eſt. gr. 30.25. Complementum gr. 59.35'. quod adiunctum declinationi Muri gr. 25. facit gr. 84. 35', quorum Tangens pro quæſita ortiua latitudine 105.46.

De Parallaxibus, & Refractionibus.

PVNCTVM LXXIV.

VT habeatur etiam aliqualis Parallaxium, & Refractionum doctrina, præmittendum, quòd habitudines omnes cœleſtes ſupputantur eo modo, quo ipſas inſpiceremus, ſi eſſemus verè in centro Terræ; at quoniam habitatur ſolum illius ſuperficies, plurimum à ſuo centro diſtans, & in qua fiunt obſeruationes rerum cœleſtium, hinc eſt, quod fit aliqua differentia, quæ græcè Parallaxis, latinè diuerſitas aſpectus, deuiatio, ſeu aberratio viſus, quæ nihil aliud importat quam differentiam cœleſtis habitudinis viſæ à centro Terræ, & viſæ à loco in Terræ ſuperficie, vt in diagramate ſupponitur quod GPH ſit dimidia Terræ ſuperficies, cuius centrum B; rationalis Horizon ABC, Phyſicus FD, Ecliptica AEC, Stellæ in punctis S, T Horizontis phyſici connotantibus earumdem Stellarum parallaxim Horizontalem ID, & XF per lineas ductas à centro Terræ, centrumque Stellæ. Etiam Stellæ ſint in

in M, & N, eleuatæ ſupra Horizontem; erunt earum Parallaxes QR determinatæ à linea BQ ducta à centro Terræ, & OQ à loco O obſeruantis, nec non KL per BL, & PK, poſito obſeruatore in P.



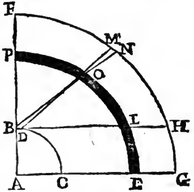
Ad ſupputationem Parallaxium requiritur diſtantia Stellæ à vertice, & diſtantia eiuſdem Stellæ à Centro Terræ in linea recta à centro Terræ ad Stellam ducta: pro maxima Parallaxi, quæ circa Horizontem contingit, vt Stellæ poſitæ in T, ijs notis, in triangulo Plano rectilineo BPT, & rectangulo, cognitum erit latus BP, & latus BT, quare haberi poterit quoque angulus Parallacticus BTP, æqualis angulo FTX menſurato ab arcu Parallaxis XF.

Pro cæteris vero eleuatis Stellis ſupra Horizontem vt in N, in obliquangulo triangulo BNP erunt cognita tria BP, & BN ſimiliter vt ſupra, nec non angulus NBP, per diſtantiam Stellæ ab E vertice, vnde & inueniri poterit angulus quęſitus parallacticus BNP, æqualis angulo KNL, & arcui parallaxis KL.

Quoad Refractiones, vt facilius cognoſcatur notio, ac definitio earumdem, conſiderabitur quòd Radij luminoſi corporis, vt tenuioris reſiſtētiæ incidentes in Corpus denſum reſiſtens, reflectuntur, quod Corpus conſtituitur ab eleuatis ſurſum Vaporibus, & ex eo quia reflectuntur non poſſunt occurrere oculis obſeruantibus niſi refractè, hoc eſt non directè, per quod cœleſtia apparent, auxilio mathematicalium Menſurarum eleuatiora, quàm in veritate ſint, vndæ definitur refractio quod ſit directi radij propagatio inflexa facta in communi ſuperficie duorum diaphanorum diuerſæ denſitatis: patet hæc refractio oculariter in Denario, vel alio in Vaſis alicuius fundo collocato, ſi namque ſic poſito Denario recedes à Vaſe quouſque denarius ob latera Vaſis interpoſita conſpici non poſſit, repleto Vaſe aqua, vel alio liquore, ſtatim viſui tuo denarius (idem alias occultus) præbebitur aſpiciendus, quæ eadem contingere Stellis ſuadet experientia, eleuatiores enim à terra proſpectæ citius oriun-

oriuntur, ac ocyus occidunt, quam exigat calculus Aſtronomicus.

In adiuncto ſchemate eſt A centrum Terræ; ABC quadrans eiuſdem; PHG Verticalis circulus; POE ſphæra craſſiorum vaporum, verus Stellæ locus in N, cuius radij in O refringuntur ad M, & ita ab Obſeruante conſpicitur in M, non in vero loco N ratione refractionis, quæ tanta eſt in hoc caſu, quantus eſt arcus MN, aut angulus MON, vel BOD ad verticem.



Ex quibus colligitur diuerſos eſſe Parallaxis, & Refractionis effectus, cum illa locum Stellæ deprimat, & hæc eleuet: Subtrahatur igitur ſemper parallaxis à Refractione, vt per reſſiduum habeantur veræ Stellarum Altitudines, & diſtantiæ à Vertice, cum hac cautela quod refractiones ſemper adduntur. Diſtantiæ obſeruatæ à Vertice & demuntur ab Altitudine, ſed è contra in Parallaxibus. Tabulam Parallaxium, & Refractionum ob commodum maius, addimus diſtinctam in Æſtiuas, Æquinoctiales, ac Hybernas refractiones, ac Parallaxes ſecundum maximas, medias, ac minimas Stellarum diſtantias à centro Terræ, atque ex his, vt innoteſcat Refractio intermedia æſtiuæ, & æquinoctiali vel Hybernæ debebit fieri proportio per declinationem, vt exempli gratia habetur diſtautia à Vertice gr. 46. ☼ nec non & eiuſdem declinatio gr. 5. competit gr. 46. refractio æquinoctialis min. 1. ſec. 8, æſtiua min. 1. ſec. 1. differentia ſec. 7. vndè ſi maxima declinatio gr. 23. min. 30. dat ſec. 7.; quid gr. 5. eiuſdem declinationis, & habetur ſec. 1. cum dimidio circiter ſubducenda ab æquinoctiali refractione min. 1. ſec. 8; vt fiat vera diſtantia à Vertice gr. 46. min. 0. ſect. 23. propter demendam à producto, ſupponitur enim quoq; ☼ in Media diſtantia, Parallaxim ſec. 43.

Vbi notandum quod hiſce temporibus ☼ eſt in Apogeo dum percurrit circiter gr. 8. ♋, in Perigeo dum habet circiter gr. 8. ♑, & in media diſtantia dum ſimiliter gr. 8. ♈ vel ♎ perluſtrat.

Refractio æſtiua adibetur extante ☼ in ♋, æquinoctialis cum erit in ♈, vel ♎, Hyberna cum in ♑.

Ac vt ſupra etiam pro ſumendis partibus proportionalibus Parallaxium de vna tempeſtate in aliam diſponenda eſt aurea regula cum Stellæ declinatione.

TABVLA CASSINIANA.

Parallaxium, & Refractionum, communium omnibus Planetis, & Stellis fixis.

		Refractio						Parallaxis			
Diſtantia à Vertice	Altitudo	Æmmm.		Æquin		Hyberna		In Agog.	Med. diſt.	In Prig.	
Gr.	Gr.	I.	II.	I.	II.	I.	II.	II.	II.	I.	II.
0	90	0	0	0	0	0	0	0	0	0	0
4	86	0	4	0	4	0	4	4	4	0	4
7	83	0	7	0	7	0	8	7	7	0	7
10	80	0	10	0	11	0	12	10	10	0	10
13	77	0	13	0	15	0	17	13	13	0	13
16	74	0	17	0	19	0	21	16	16	0	16
19	71	0	20	0	22	0	25	19	19	0	19
22	68	0	24	0	26	0	30	22	22	0	22
25	65	0	27	0	30	0	34	25	25	0	25
28	62	0	31	0	34	0	38	27	28	0	28
31	59	0	35	0	39	0	43	30	30	0	31
34	56	0	40	0	44	0	49	32	33	0	34
37	53	0	45	0	50	0	55	35	36	0	36
40	50	0	50	0	55	1	1	38	39	0	39
43	47	0	56	1	1	1	7	40	41	0	41
46	44	1	1	1	8	1	16	42	43	0	43
49	41	1	7	1	15	1	24	44	45	0	45
52	38	1	15	1	24	1	33	46	47	0	47
55	35	1	23	1	33	1	43	48	48	0	49
58	32	1	44	1	45	1	57	49	50	0	51
61	29	1	46	1	58	2	12	51	52	0	52
64	26	2	0	2	15	2	30	52	53	0	54
67	23	2	18	2	34	2	50	53	54	0	55
70	20	2	39	2	59	3	20	54	55	0	56
73	17	3	11	3	33	3	56	55	56	0	57
76	14	3	54	4	21	4	49	56	57	0	58
79	11	4	58	5	32	6	7	57	58	0	59
82	8	6	47	7	33	8	21	57	58	0	59
83	7	7	44	8	35	9	27	58	59	1	0
84	6	7	55	9	53	10	52	58	59	1	0
85	5	10	32	11	38	12	45	58	59	1	0
86	4	12	48	14	4	25	20	58	59	1	0
87	3	16	6	17	29	18	52	58	59	1	0
88	2	21	4	22	30	23	57	58	59	1	0
89	1	27	56	18	51	29	46	58	59	1	0
90	0	32	20	32	40	33	0	58	59	1	0

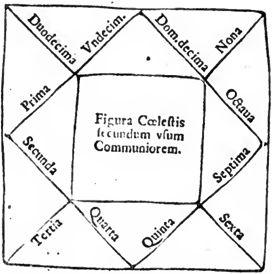
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Parallaxium, ac Refractionum Tabulam præmiſimus, quia maximè difficilis eſt earumdem exacta ſupputatio, fundamentum enim dependet à Refractione, & Parallaxi horizontali difficilimi inuenti, & poſtea à ſubtili reſolutione duorum Triangulorum.

De definitione Cœleſtis figuræ.

PVNCTVM LXXV.

PEr Cœleſtem figuram intelligitur quædam totius Cœli deſcriptio in Plano, in qua cœlorum partes præcipuæ vna cum Planetis repræſentantur eo ſitu, in quo reſpectu alicuius loci Mundi, aliquo temporis momento, fuere.



Hocque erit ſupponendò totum Cœlum diuiſum à ſex maioribus circulis ſicuti in puncto 34. aut aliqua alia methodo, dummodo figura totum cœlum demonſtret diuiſum in duodecim partes æquales, vt & infra, earumque altera domus cœli nuncupabitur.

Vbi numerus domus apponitur, ibi ipſius initium eſt, & in ſequentem ordinatim terminat: vt duodecima in Primam, Prima in ſecundam, &c.

PVNCTVM LXXVI.

PRimo, vt in antecedenti deſcribatur figura, in cuius interno quadrato tempus, & Aſtronomicum collocetur, & in aliquo angulorum ponatur eleuatio poliillius loci, quo cœleſtis vult erigi figura per Punct. 23. & per additionem circiter horæ dimidiæ horis horologij communis, vt fiat tempus ab occaſu Solis.

Secundo, datum tempus per punctum 31. & 32. reducatur in Aſtronomicum, addendo ſemper arcum ſemidiurnum, & verum ſeminocturnum horis ab occaſu Solis.

Tertio, tempus æquetur per punctum 47. & ſi neceſſe ſit per punctum 15.

Quarto per punctum 19. ſupputentur loca Planetarum ad tempus PM æquatum.

Quinto, per punctum 26. quæratur aſcenſio recta Solis in horis, & minutis diuiſi æquatoris circuli pro tabulis appoſitis adhibendis.

Sexto, inuentæ aſcenſioni rectæ Solis, addantur horæ P. M, vt habeatur aſcenſio recta domus decimæ, vel medij cœli.

Septimo, per punctum 34. inueniantur partes Zodiaci competentes domuum aſcenſionibus, procedendo, vt in toto dicto puncto, & optimè conſtruendo ſchema repreſentatiuum cœleſtis figuræ, ne error accidat in ſupputandis triangulis.

Octauo, inuentæ partes Zodiaci, ponantur in ſuis domibus ſecundum correſpondentiam.

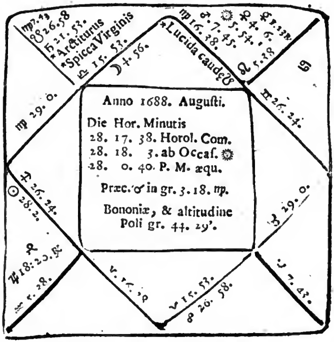
Vltimo, ſecundum ordinem ſignorum, ſupputata loca Planetarum, cum cæteris, quæ ſequentur, ſi placuerit, ponantur in cœleſti figura, ſigno, quo inſunt, & ſecundum proceſſum numerorum, vt ex. gratia deſcribenda ſit cœleſtis figura Anno 1688. Auguſti die 28. Bononiæ datis horis 17. 38. min. horologij communis, his ſi addentur min. 25. & h. 6. 37. arcus ſemidiurni, fiet Aſtronomicum tempus hor. 0. min. 40. P.M. die 28. quod tempus etiam erit æquatum, vt in puncto 47.

Et quia fuit repertus Sol in gr. 5. 54'. ♍ ideò fuit inuenta ipſius aſcenſio recta hor. 10. 30. 49. vt in puncto 26. quibus adiungendo horas P.M. 0. 40. elicitur aſcenſio recta medij cœli hor. 11. 10. 49''. cum qua vt in puncto 34. extrahuntur portiones Zodiaci, vt dicebatur, vnde fit ſchema ſequens cœleſte, in quo omnia ſuis locis collocantur.

Mul-

Multoties euenit, quod non omnia duodecim ſigna propter aſcenſiones ſunt in cuſpidibus domorum, ideoque ſi aliqua non ſint in domibus, quæ ſigna intercepta vocabuntur, debent poni in medio domus competentis, ſecundum ordinem ſignorum, vt in exemplo de ♋, & ♑.

Aſcenſio recta Medij Cœli h. 11. 10. 49″.



Vbi videbis Planetas omnes fuiſſe ſignis ſuis collocatos, vt exempli gratia fuerunt inuenti ♂ ☉ ♀ in ♍, vt in puncto 19. ideò poſiti fuerunt in ♍ pariter ♃ inuentus fuit in ♑, quare poſitus fuit in ♑; & ita de cæteris. Et hìc animaduerte etiam ſequentia.

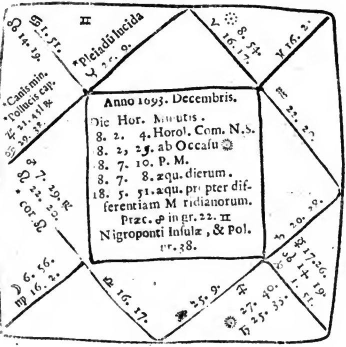
Si aliquis Planeta retrogradus ſit, ſcilicet quando mouetur contra ordinem numerorum, ac ſignorum debebit notari in figura cum hoc ſigno ℞, vt notauimus in ♃: ſi ſtationarius, nempè quando non mouetur, ac differentia motus diurni ab vna die ad aliam nulla eſt, notari quoq; debebit hoc altero ſigno: Stat; hæcque vt in ſpectione cœleſtis figuræ cogno-

gnoſcatur quodlibet accidens, quod tempore cœleſtis figuræ erat in cœlis.

Non aſſignatur tamen ſignum ℞, ☊, vel ☋, quia notum apud omnes eſſe debet ☊, & ☋ ſemper retrogradi, quod de Planetis non verificatur.

Etiam erigenda ſit altera Cœleſtis figura in diuerſa poli eleuatione ab ea Bononiæ, alteriuſue loci gr.44.29'. & ſic exempli cauſa Conſtruenda in altitudine poli gr. 38. Anno 1693. hor. 2. min. 4. poſt naturalem diem 18. Decembris aut hor.2. 4'. n. s.; quod ſuppoſuimus in puncto 35. vbi additis min. 25. ſuppoſitum fuit tempus hor. 2. min. 29. ab Occaſu ☉ i deo conſulatur idem punctum 35. & deinde ſciatur operationes omnes ſemper futuras eaſdem, prout adduximus in eleuatione poli gr. 44. 29'. exceptis æquationibus faciendis, de quibus monuimus in dicto puncto 35. erit igitur aliud exemplum figuræ cœleſtis, vt ſequitur.

Aſcenſio recta Medij Cœli h. 1. o'. o''.



Per

Per quam cœleſtem figuram animaduertendum quoque eſt tempus P.M. aut poſt Meridiem dupliciter æquatum fuiſſe, ſcilicet propter naturalium dierum differentiam, aut æquationem, & propter Meridiani differentiam, quæ eſt inter Meridianum noſtrum Bononiæ, & Meridianum Inſulæ Nigroponti: Prima fuit inuenta min. 2. Subtract. de qua diximus in puncto 47. ſupra de dierum naturalium Æquatione: Altera fuit inuenta horæ 1.3 & min. 17. pariter cum titulo S. Subtractionis, de quibus etiam ſupra in puncto 15. vbi egimus de circulo Meridiani.

Longitudo Bononiæ	gr. 34.	30.	
Longitudo Nigroponti	gr. 53.	40.	
Differentia	gr. 19.	10.	
Multitiplicata per		4.	
Dat temporis differe. h. 1.	16.	40''.	Subtractiuam.

De punctis Aſtrologorum imaginarijs in Cœlo.

PVNCTVM LXXVII.

VT fortius appareant Aſtrologorum aliquorum peruicaciæ in ſaluandis effectibus, qui ipſos confundebant, dum nullam cauſam dati effectus exponere ſciebant, niſi ab imaginatione præſidium petijſſent, plurimis vicibus plurima imaginaria imaginati ſunt.

Nam cuiuſcumque domus conſiderabant dominum, quem ſubtrahebant à ſigno, & gradu, & cuſpidis, cuius, partem inquirebant, & producto dum addebant locum primæ, vel Orientis, & horoſcopi volebant locum partis ſecundum illius domus ſignificationem, vt in puncto 34. prouenire: Etiam inueniebant.

Partem ægritudinum pro ſexta, addẽdo Orienti domui in figura diurna diſtantiam ♄ ad ♂, & nocte è contra.

Partem connubij, ſiue vxoris pro ſeptima à ♄ in ♀, & addebant horoſcopo, ſed in geneſi viri, quia in geneſi fœminæ ſumebant à ♀ ad ♄, & Orienti eodem modo addebant.

Partem honorum in figura diurna ſumebant à loco Solis vſque ad gr. 19. ♈ & in nocturna à loco ☽ vſque in finem gr. 3. ♉, & congeriem addebant horoſcopo.

Et quidem tot partes in Cœlis imaginarias inueniebant, vt abſurdum

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eſſet eas non ſolum exponere, ſed & plus inuenire.

Fateor tamen dictas partes ab aliquo Aſtrologico fundamento, ſecundum meum intelligendi modum non deſiderare.

Hæ partes modo neutiquam vſui offeruntur, vt pars fortunæ, cuius inentum apud omnes commune eſt.

Inuenitur pars fortunæ hoc charactere notata ⊙ ſubtrahendo locum Solis à loco ☽, & addendo horoſcopum producto, vt exempli gratia in oppoſita figura.

Locus ☼	ſig.	6.	4.	56.	
Locus ☼	ſig.	5.	5.	54.	Deme.
Diſtantia ☼ à ☽	ſig.	0.	29.	2.	
Horoſcopus	ſig.	7.	29	6.	Adde.
Locus ☼	ſig.	8.	28.	2.	

Locus ⊙ ſig. 8. 28. 2'. id eſt in gr. 28. 2'. ♐, qui in figura apponitur vt alij Planetæ, & videbitur ⊙ in ſecundo domicilio cum ſigno. ♐.

Probatio an bene ſit inuentus ⊙ locus ex eo habetur, quod tantam debet habere ⊙ diſtantiam ab horoſcopo, ſicuti ☼ à ☽: igitur ſi ſubtraharut horoſcopus à loco ⊙, & productum æquale ſit diſtantiæ ☼ à ☽ bene inuentus erit locus ⊙.

Diſtantia vt ſupra ☼ à ☽	ſig.	0.	29.	2.
Locus ⊙	ſig.	8.	28.	2.
Locus horoſcopi ſubducendus	ſig.	7.	29.	0.

Ergo tam diſtat ⊙ ab horoſcopo, ſicut ☼. à ☽ ſig. 0. 29. 2. & bene inuentus eſt locus ⊙.

De Antiſcijs, & Contrantiſcijs.

PVNCTVM. LXXVIII.

OBſeruant etiam Aſtrologi in figura cœleſti puncta quædam, quæ ab ijs dicuntur Antiſcia, & ſunt puncta quædam æqualiter à tropicis diſtantia, in quibus dum eſt ſtella aliqua æquales deſcribit reuolutiones, vocanturque puncta ſe intuentia, & eiuſdem potentiæ, forſan quia ab ijſdem Horizontis partibus oriri, & occidere notum ſit, ſuntq; contrantiſcia puncta oppoſita antiſcijs.

Pro inueniendo antiſcio, dematur longitudo ſtellæ à gr. 30. ſemper,

&

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& fient gradus, & minuta antiſcij, cuius ſigna inuenientur, ſi duodecim ſigna Zodiaci diuidentur in duas æquas portiones, & adnotabitur in diuiſione ſignum primum antiſcium eſſe vltimi, ſecundum quinti, tertium quarti, vt exempli gratia, Quæratur entiſcium Solis in gr. 5. 45. ♍ demendo gr. 5. 54. à gr. 30. fiunt gr. 24. 6. pro antiſcio, quia ☉ eſt in ♍ in primis ſex ſignis Zodiaci ipſi competit ſignum ♈ quare antiſcium ☉ erit in gr. 24. 6. ♈, eritque ipſius contratiſcium in gr. 24. 6. ♎, quia ♎ oppoſita eſt ♈, & ſic in alijs.

De aſpectibus ſtellarum inter ſe, & modo eformandi ſpeculum Aſtrologicum.

PVNCTVM LXXIX.

SI fictum non eſt ex omnium cœlorum optimè ordinatis motibus, veros promi concentus ſequi poterit ex ijs gigni, ex quibus conſtituuntnr, vt accidit ex immixtione conſonantiarum, quarum, aliqua nomina explicari ſolent apud Muſicos per vniſonum, diapaſou, & diſdiapaſon epidiapente, diapaſon, epidiapente, diſdiapaſon cum ditono, diapaſon, cum ditono, diapaſon, cum ſemiditono, diapaſon cum exachordo maiore, & diapaſon diateſſaron.

Et quidem, vt ex conſonantijs expoſitis oritur optimus concentus, ita & ex his aſpectuum ratio concludi videtur, nam eam quam ex conſonantiæ proportionem ſequuntur, & aſpectus requirunt, vnde notandum, quod.

Inter Planetarum aſpectus hæc ſic inſcripta ☌ coniunctio, quæ vniſono adaptatur, & accidit, cum Planetæ eamdem cœli partem percurrunt, oppoſitio ſic adnotata ☍, cum Planetæ, aut ſtellæ inter ſe diſtant gr. 180. & diapaſon ſequitur, vt & in hac tebella.

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Nomina aſpectuum.	Characteres	Gradus Zodiaci intercepti.	Conſonantiæ.
Coniunctio	bona, & ☌ mala	360	Vniſonus
Oppoſitio	mala ☍	180	Diapaſon
Quadratus	malus □	90	Diſdiapaſon
Sextilis	bonus ✶	60	Diſdiapaſ. Epidiapente.
Trinus	optimus △	120	Diapaſon Epidiapente.
Quintilis		12	Diapaſon cum ditono
Biquintilis		144	Diapaſon cum ditono
Quincux		150	Diapaſou cum ſemiditono
Tridecilis		108	Diapaſon cum exacordo maiore.
Seſquiquadrus.		135	Dipaſon diateſſaron.

Horum aſpectuum alij ſun placiti, & alij partiles, alij, & abſoluti, alij dexteri, & alij ſiniſtri.

Aſpectus placiti ſunt, quando inter ſtellas adeſt quidem aſpectus quantitas determinatiua, ſed lato modo, neque præciſo, vt ſi deficiat ea quantitas qnantitate orbis ſtellarum, pro quo ſubiungitur hæc tabella.

Tabella quantitatis lucis orbium Planetarum.

	G	M
♄	16	0
♃	12	0
♂	7	30
☉	17	
♀	8	0
☿	7	0
☽	12	30

fixarum magnitudinis	g.	m.
Primæ	7	30
Secundæ	5	30
Tertiæ	3	30
Quartæ	1	30

Quare dici poſſunt ſtellæ aliquo ineſſe aſpectu, aut configuratione cum etiam quantitas determinans aſpectum deficeret, aut excederet quantitate orbis, vt exempli gratia, ſi inter aliquam ſtellam quampiam, & ♄ eſſent intercepti exempli gratia, gr. 80. eſſet eam inter ſtellam aſpectus quadratus, nam addendo gr. 80. gr. 10. quantitatis lucis orbis ♄ aggregarentur gr. 90. determinatiui aſpectus quadrati, ſic ſi diſtantia eſſet

gr.

gr. 100. nam quantitas lucis orbis ♄ ſubduceretur, & ſic in alijs.

Partiles aſpectus ſunt cum ſtellæ verè conueniunt in quantitate graduum determinatiua aſpectus, ac ſi aliqua differentiuncula eſt, ſit quanta ſtellarum ſemidiameter, vt ſi ſit ☽ in gr. 27. ♊ & ☉ in gr. 27. ♍ vbi elicitur diſtantia præciſa gr. 90. vnde concluditur eſſe inter ☉, & ☽ quadratum aſpectum partilem.

Partiles aſpectus abſoluti accidnnt cum ſtellæ, tam quo ad longitudinem, quam latitudinem in quantitate aſpectus conueniunt, vt ſi ☿ ſit in gr. 25. ♍ cum gr. 1. latitudinis borealis, & ſit altera ſtella præciſè in gr. 25. ♍ cum dicta latitudine ☿ Aſpectus ſiniſtri appellantur ij, qui eueniunt ſecundum ordinem ſignorum, & dexteri, qui fiunt contra ordinem eorum.

Almugea Planetarum dicitur cum Planetæ, ſi ſe aſpexerint, ſemet aſpexerint in ſignis propriæ dignitatis eſſentialis.

Quinque tantum principales ſequor aſpectus nempe, ☌ ⚹ □ △ ☍, atque hi ſolum communiter conſiderantur, vt magis principales, atque ex his tantum Aſtrologicum ſpeculum cum ſtellis fixis, parallelis, aut antiſcijs ſtellarum, etſi vel melius hæc in ſpeculo Aſtrologico poſſint intelligi, concluditur.

Ad conſtruendum Aſtrologicum ſpeculum, diſponantur ea, quæ volunt Aſtrologico ſpeculo donari ſecundum ordinem graduum, & minutorum, nam ea, quæ erunt in minoribus gradibus, & minutis, debebunt prius in ſpeculo collocari, & huius operationis ratio eſt, vt habeatur ordinatus motus ſtellæ ad ſtellam, vt infrà, habebiſque ex ſequenti methodum fabricandi ſpeculum Aſtrologicum pro omnibus alijs cęleſtibus figuris.

Zodiacus.	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓
☿ 1. 23. ♍		△	□	✱		☿		✱	□	△		☍
♀ 4. 16. ♍.		△	□	✱		♀		✱	□	△		☍
☽ 4. 56. ♎	☍		△	□	✱		☽		✱	□	△	
☉ 5. 54. ♍		△	□	✱		☉		✱	□	△		☍
♂ 7. 45. ♍		△	□	✱		♂		✱	□	△		☍
MC 16.48. ♍						MC						I.C.
♃ 18. 20. ♑	□	△		☍		△	□	✱		♃		✱
♄ 21. 53. ♎	☍		△	□	✱		♄		✱	□	△	
☊ ☋ 26.58. ♈ ♎	☊						☋					
⁘ 28. 2. ♐									⁘			
Aſc. 29. ♏		VII						Aſc.				

Quia MC. Aſcendens ⊙ ☊, & non habent radios, vtpotè imaginaria puncta, ideo ijs aſpectus aliqui non dantur. In cæteris à quibus emittuntur radij, & aſpectus, ſic neceſſe fui, operari, vt in ♀, quæ cum ſit in gr. 4. 16. ♍, mittet aſpectum proprium ✱ in gr. 4. 16. ♏, □ in gr. 4. 16. ♐, & vt ex ſuperioribus.

Mo-

Momentum alicuius aſpectus inter ſtellas aliquas definire.

PVNCTVM LXXX.

SCiantur quam proximè, vt per Ephemerides, duobus diebus, duo loca ſtellarum talia, vt vnus docet aſpectum futurum, & aliud iam eſſe tranſactum, & inter prima duo ſumatur differentia per ſubtractionem, vt ſolet, & fiet tertius numerus aureæ regulæ.

Deinde ſumantur motus diurni ſtellarum, & ſi ſint ambo directi, aut retrogradi, motus minor, & maior ſubtrahatur, & addetur ſi earum altera habeat motũ retrogradum, & productum erit primus numerus pro aurea regula. Exemplum erit, ſi quæratur, quo minuto temporis per appoſitas meas Ephemerides accidat nouilunium, aut ☌ ☉, & ☽ fine menſis Auguſti anno 1688.

Quia in ☌ planetæ, aut ſtellæ habere debent eumdem Zodiaci locum, neceſse eſt, quod ☉, & ☽ ſimilem, vt coniungantur percurrant, quare percurrendo eiuſdem temporis Ephemerides aſpicio, quod die 25. Auguſti locus ☉ eſt in grad. 2. 58. 17. ♍, & ☽ eſt in gr. 28. 17. ♌ amplius die 26. locus ☉ in gr. 3. 56. 21. ♍, & locus ☽ in grad. 10. 31. ♍, vnde dantur duo loca hanc ☌ intercipientia, inter quæ ſumentur, vt infra differentiæ.

Locus ☉ die 25. Auguſti	gr. 2. 58'. 17'. ♍	☽ gr. 28. 17. ♌
Locus ☉ die 26. Auguſti	gr. 3. 56. 21. ♍	☽ gr. 10. 31. ♍
Motus diurnus ☉	gr. 0. 58. 4. ♍	☽ gr. 12. 14.
Quia ☉, & ☽ ſuut directi demo motum ☉ diurnum		gr. 0. 58.
à motu diurno ☽, & fit ſuperatio diurna		☽ gr. 11. 16.

Pariter ſubtrahatur locus ☽ gr 28. 17. ♌ à loco ☉ gr. 2. 58'. 17''. ♍ nam demi debet ſemper Planeta motus velocioris, & fient grad. 4. 41'. prætermiſsis ſec. cum his dicatur, ſi ſuperatio diurna ☽ grad. 11. 16'. aut min. 676. facit horas 24. quas gr. 4. 41'. aut min. 281. differentiæ aſpectus, & multiplicando 281. per 24. producitur 6744. quod diuidendo per 676. eliciuntur horæ 8. cum min. 28. vnde cognoſcitur ſucceſſuram ☉, & ☽ ☌ hor. 8. 28. P. M. diei 25. Auguſti Anno 1688.

Probatio huius operationis haberi poterit ſupputando loca ſtellarum per probata ad datum tempus, nam ipſa conuenientia laudant operationem, & diſcrepantia nouum operationis laborem requirunt.

Deindè vt habeatur verum tempus aſpectus neceſſe eſt inuento tempori aſpectus applicare æquationem dierum naturalium, iuxtà quæ docui-

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cuimus in puncto 47. exempli gratia momento præfatæ ☌ ☉ ☽ erit ☉ in gr. 3. ♍ cui competit æquatio, de qua ſupra vnius minuti modo ſubtractiui cum ſit conuertendum tempus æquale in apparens, & verum, erit ergo momentum verum ſupradictæ luminarium ☌ h.8.26'. P.M. diei 25. Auguſti Anni 1688.

Quomodo inueniatur præcedens ☌ vel ☍ Solis cum Luna.

PVNCTVM LXXXI.

NIſi figura cœleſtis erecta ſit ad punctum alicuius ☌, vel ☍ neceſſe erit præcedentem luminarium ☌, aut ☍ nanciſci ob auxilium aliarum operationum aſtrologicarum.

Hæ præc. ☌, aut ☍ vt inueniantur auxilio Ephemeridũ, adeunda erit tabula, in qua notantur aſpectus ☽ cum Planetis, & aſpectus Planetarum inter ſe, & in ea erit quærenda dies erectæ figuræ, ſupra quam retrocedendum erit, vſquequo ſub columna Solis, vel ☍, aut ☌ ☉ cum ☽ reperiatur.

Si inueniatur ☌ ☉, ☽ præceſſiſſe, animaduertendum, an ipſa præceſſiſſet in ipſo verò meridici puncto, aut extra ipſum, quod per Ephemerides patere poteſt, ſi in Meridie ☉ ☽ eumdem habuerunt in Zodiaco locum; quod ſi erit ſumatur vterliber ☉, vel ☽ locus in Zodiaco, & ipſe erit locus quæſitus, qui ſolet apponi in extremitate interni quadrati cœleſtis figuræ.

Sed ſi extra meridiei tempus accidiſſet, inueniendum eſt tempus quo euenit per antecedens, ad quod per punctum 19. ſupputabitur, aut Sol, vel ☽, & poſt eam, vt ſupra.

Aſt ſi inueniatur præceſſiſſe oppoſitionem ☉, & ☽ dicta debent ſecundum neceſſitatem haberi, excepto hoc, quod ſi tempore oppoſititionis fuit Sol ſupra Terram, debet accipi ſignũ ☉, ſi verò ſub Terra, debet accipi ſignum oppoſitum ☽, hoc forſan, quia ☉ dicitur diei, Luna vero nocti præeſſe.

Quærendum ſit, an præceſſerit ☌, vel ☍ dicta in ordine ad datum exemplum; quia non euenit ☌, vel ☍ die 28. Auguſti, retrocedo per ſupradictam tabulam, & inuenio eueniſſe ☌ die 25 eiuſdem horis. min.28. P.M. & proinde eo tempore fuiſſe luminaria in grad. 3. 18. ♍ quare ponitur in figura præc. ☌ in gr. 3. 18. ♍.

An fuerit Sol tempore oppoſitionis cum Luna, ſupra, vel infra terram co-

cognoſci poterit adnotãdo, quod in his Ephemeridibus ponitur ibidem, vbi dies appoſitionis A, ſignificans aſcendentem tempore ☍, per quem noſcimus deſcendentem, quo noto, nota etiam ſunt ſigna, quæ tempore ☍ fuerunt ſupra terram, & ſub terra, & ſic an Sol per ſuum ſignum fuerit ſupra, vel infra terram.

Alio modo ſciri poteſt quærendo per punctum 31. arcum ſemidiurnum, vel ſeminocturnum ☉ eo tempore ☍, nam ſi horæ, & minuta appoſita, vbi appoſita eſt ☍ ſint minora arcu ſemidiurno, vel ſeminocturno ☉ erit ſupra terram, ſed ſi ſint maiora erit ☉ infra terram, & conſequenter Luna ſupra terram, quia dum alter luminarium oppoſitoru m eſt ſupra terram, alter ſub terra eſſe debet, quando tamen illæ horæ, & minuta appoſita in columna ☉ etiam nõ excederent duplicatum arcum ſeminocturnum, cui etiam additus ſit arcus ſemidiurnus Sol, vel ſecundum caſum non excederent duplicatum arcum ſemidiurnum, cui additus quoq; ſit arcus ſeminocturnus, & ratio eſt quia ſi Sol, habeat arcum ſeminocturnum, & iſte arcus adiungatur duplicatio arcui ſemidiurno eiuſd em loci Sol producitur ortus huius, qui ſignificat ſuum exitum à terra.

Adnotanda in gratiam cœleſtis figuræ indagaræ.

PVNCTVM LXXXII.

ASTrologi clamitant, quod quandocumque Planetarum aliquis eſt cum aliquo fixo ſydere acquirat, habeatque fortiorem, aut humiliorem influxum ex correſpondentia, aut diſcrepantia, quare principaliter conſiderant, an aliquod fixum ſydus, tamen cum pauca latitudine, reperiatur cum aliquo Planeta, vel cuſpide, quæ principium domus eſt.

Pro hoc Inuento oppoſitus eſt breuis Catalogus ſtellarum fixarum inſignorum ad Annum 1700. ſupputatus, in quo quærendo locum Planetæ, vel cuſpidum, Domuum, facile dicta reperientur, ſicuti ♄ in prima præmiſſa cœleſti figura eſſe cum Arcturo, & ſpica ♍, Stellis primæ magnitudinis: ſic apud cuſpidem Domus Decimæ lucidam caudæ ♌, quę eſt in gr. 17. ♍, & huiuſmodi de alijs.

Cæterum Aſtrologi etiam deſumunt fixorum ſyderum poteſtatem, ac robur à nouem conſiderationibus.

Prima quarum eſt magnitudo, quia ſtellæ fixæ, quæ maiores ſunt, eo magis ſunt potentiores, ſed paruæ minores vires habent.

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Breuis Catalogus Syderum fixorum inſigniorum ad Annum 1700. *Completum.*

	Longit.			Magnit.	Natura	Latit.		
		G.	M.			G.	M.	
In extremo fluminis Eridiani	♈	22	34	1	♃ ♀	53	30	A
Caput meduſæ	♉	22	6	3	♄ ♃	22	23	B
Pleiadum lucida, aut Alcione	♉	25	55	3	♄ ♂	3	59	B
Oculus ♉ Aldebaran	♊	5	36	1	♂	5	31	A
Pes ſiniſter lucidus Orionis. Rigel	♊	12	37	1	♃ ♄	31	10	A
Capella, aut Hircus	♊	17	40	1	♂ ☿	22	52	B
Lucidus pes ♊	♋	4	52	2	☿ ♀	6	48	A
Canopus in Temone Argonauis	♋	9	24	1	♃ ♄	72	0	A
Sirius Canis maior	♋	10	5	1	♃ ♂	39	32	A
Caſtoris caput	♋	16	2	2	☿	10	5	B
Pollucis caput	♋	19	5	2	♂	6	39	B
Canis minor. Procyon	♋	21	40	2	☿ ♂	15	57	A
Nebuloſa Præſepe	♌	3	8	n.	♂ ☽	1	15	B
Cor Hydræ	♌	23	7	1	♄ ☿	22	24	A
Leonis cor. Regulus	♌	25	39	1	♂ ♃	0	26	B
In pede dextro Centauri	♍	0	42	1	♃ ♄	41	20	A
Leonis caudæ lucida	♍	17	27	1	♄ ♀	12	16	B
Spica ♍	♎	19	40	1	♀ ♂	2	0	A
Arcturus	♎	20	4	1	♃ ♂	31	1	B
Lanx Auſtralis	♏	10	56	2	♄ ♂	0	25	B
Lanx Borealis	♏	15	12	2	♄ ☿	8	33	B
Borealis in fronte ♏	♏	28	57	2	♂ ♄	1	7	B
Scorpij cor. Antares	♐	5	35	1	♂ ♃	4	27	A
Sequens aculeum ♏	♐	23	31	n.	♂ ☾	13	39	A
In oculo ♐ duplex	♑	7	46	n.	☉ ♂	0	25	B
Lucida lyræ	♑	11	6	1	♀ ☿	61	47	B
Supra cornu præc. ♑	♑	28	34	n.	♂ ☽	7	17	B
In fronte præc. ♑	♑	28	39	n.	♂ ☽	0	25	B
Occidentalis in fronte ♑	♒	0	23	n.	♂ ☽	0	50	B
Orientalis nebuloſa	♒	1	7	n.	♂ ☽	0	29	B
Tomahan in effuſione ♒	♒	29	37	1	♀ ☿	21	0	A

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Secunda eſt lumen, nam quæcumque ſtellæ fixæ lumen clarum, & lucidum habent, illuſtres effectus cauſant; quæ plurimum rutilant, magnas conturbationes efficiunt; quæ denſum lumen habent efficaces exiſtunt, quæ rarum debiliores, & quæ parum luminis habent, vt obſcuræ, & Nebuloſæ, malos effectus cauſant.

Tertia color, nam quæ candidum, & ſplendidum colorem habent Iouis vires referunt, quæ vero claræ, ſplendidæ, ac modicè rubentes naturam ☉ gerunt; Splendiſſimæ, atquè buxeæ robur ♀ retinent, Candidæ pallentes, & hebetis luminis effectus ☽ producunt; Rubræ quoq; naturam ♂ inſinuant, plumbeæ vero ♄; Splendidæ cinereæ qualitates ☿ inſinuant, Nebuloſæ, aut maculoſæ ☽ ♂; tenebroſæ ☽, & ♄ naturam demonſtrant.

Quarta comparatio ſtellarum fixarum ad partes cœli, quarum cum aliæ ſint immutabiles, vt latitudo, aliæ mutabiles, vt duodecim Domus cæleſtes, ideò conſiderantur ſecundum longitudinem quatenus ad Zodiacum referuntur, vt ſcilicet in tali ſigno ſint &c.

Quinta latitudo, quæ enim incidunt in ſignifero cæteris maiorem poteſtatem retinent, ſed etiam maiorem, quæ incidunt in Ecliptica, ſed extra Eclipticam, ac Zodiacum, proportione latitudinis, ſunt debiliores, & quoad nos Septemtrionales præponuntur Stellæ fixæ, quæ vergunt ad Septemtrionem, ijs, quæ tendunt ad Auſtrum.

Sexta declinatio, nam etiam ſtellæ fixæ habentes declinationem Septemtrionalem præponuntur alijs, quæ habent Auſtralem.

Septima poſitio in domibus cæleſtibus, nam ſunt efficaces, quæ ſunt in domorum initijs, & potentiores, quæ Medium cœli, Horoſcopum, ac ſeptimam Domum percurrunt,

Octaua Ortus, & Occaſus, Verticalitas, nempè ſi in Vertice alicuius loci, quia ſic in eo loco ſunt potentiores, & Horizontalitas, ſcilicet ſi alicuius loci horizontalem circumferētiam ambiunt, huiuſcemodi enim quoque ibidem potentiores cognoſcuntur.

Nona habitudo ſtellarum fixarum cum ☉, cæteriſque Planetis.

Hæcque habitudo modis decem contingere poteſt:

Primus: ſi ſecundum ſolam longitudinem cum Planetis copulentur.

Secundus: ſi in exacto Planetarum Antiſcio reperiantur.

Tertius: ſi in radijs Planetarum conſtituantur:

Quartus: ſi ſimul oriantur, aut occidant ſtella fixa, ac Planeta, vel plures.

Quintus: ſi ſimul medium, vel Imum cœli perluſtrent ſtella fixa, & Planeta, ſeu plures.

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Breuis Catalogus Syderum fixorum inſigniorum ad Annum 1700. Completum.

	Longit.				Natura	Latit.		
		G.	M.	Magnit.		G.	M.	
In extremo fluminis Eridiani	♈	22	34	1	♃ ♀	53	30	A
Caput meduſæ	♉	22	6	3	♄ ♃	22	23	B
Pleiadum lucida, aut Alcione	♉	25	55	3	♄ ♂	3	59	B
Oculus ♉ Aldebaran	♊	5	36	1	♂	5	31	A
Pes ſiniſter lucidus Orionis. Rigel	♊	12	37	1	♃ ♄	31	10	A
Capella, aut Hircus	♊	17	40	1	♂ ☿	22	52	B
Lucidus pes ♊	♋	4	52	2	☿ ♀	6	48	A
Canopus in Temone Argonauis	♋	9	24	1	♃ ♄	72	0	A
Sirius Canis maior	♋	10	5	1	♃ ♂	39	32	A
Caſtoris caput	♋	16	2	2	☿	10	5	B
Pollucis caput	♋	19	5	2	♂	6	39	B
Canis minor. Procyon	♋	21	40	2	☿ ♂	15	57	A
Nebuloſa Præſepe	♌	3	8	n.	♂ ☽	1	15	B
Cor Hydræ	♌	23	7	1	♄ ☿	22	24	A
Leonis cor. Regulus	♌	25	39	1	♂ ♃	0	26	B
In pede dextro Centauri	♍	0	42	1	♃ ♄	41	20	A
Leonis caudæ lucida	♍	17	27	1	♄ ♀	12	16	B
Spica ♍	♎	19	40	1	♀ ♂	2	0	A
Arcturus	♎	20	4	1	♃ ♂	31	1	B
Lanx Auſtralis	♏	10	56	2	♄ ♂	0	25	B
Lanx Borealis	♏	15	12	2	♄ ☿	8	33	B
Borealis in fronte ♏	♏	28	57	2	♂ ♄	1	7	B
Scorpij cor. Antares	♐	5	35	1	♂ ♃	4	27	A
Sequens aculeum ♏	♐	23	31	n.	♂ ☾	13	39	A
In oculo ♐ duplex	♑	7	46	n.	☉ ♂	0	25	B
Lucida lyræ	♑	11	6	1	♀ ☿	61	47	B
Supra cornu præc. ♑	♑	28	34	n.	♂ ☽	7	17	B
In fronte præc. ♑	♑	28	39	n.	♂ ☽	0	25	B
Occidentalis in fronte ♑	♒	0	23	n.	♂ ☽	0	50	B
Orientalis nebuloſa	♒	1	7	n.	♂ ☽	0	29	B
Tomahan in effuſione ♒	♒	29	37	1	♀ ☿	21	0	A

Secunda eſt lumen, nam quæcumque ſtellæ fixæ lumen clarum, & lucidum habent, illuſtres effectus cauſant; quæ plurimum rutilant, magnas conturbationes efficiunt; quæ denſum lumen habent efficaces exiſtunt, quæ rarum debiliores, & quæ parum luminis habent, vt obſcuræ, & Nebuloſæ, malos effectus cauſant.

Tertia color, nam quæ candidum, & ſplendidum colorem habent Iouis vires referunt, quæ vero claræ, ſplendidæ, ac modicè rubentes naturam ☉ gerunt; Splendiſſimæ, atquè buxeæ robur ♀ retinent, Candidæ pallentes, & hebetis luminis effectus ☽ producunt; Rubræ quoq; naturam ♂ inſinuant, plumbeæ vero ♄; Splendidæ cinereæ qualitates ☿ inſinuant, Nebuloſæ, aut maculoſæ ☽ ♂; tenebroſæ ☽, & ♄ naturam demonſtrant.

Quarta comparatio ſtellarum fixarum ad partes cœli, quarum cum aliæ ſint immutabiles, vt latitudo, aliæ mutabiles, vt duodecim Domus cæleſtes, ideò conſiderantur ſecundum longitudinem quatenus ad Zodiacum referuntur, vt ſcilicet in tali ſigno ſint &c.

Quinta latitudo, quæ enim incidunt in ſignifero cæteris maiorem poteſtatem retinent, ſed etiam maiorem, quæ incidunt in Ecliptica, ſed extra Eclipticam, ac Zodiacum, proportione latitudinis, ſunt debiliores, & quoad nos Septemtrionales præponuntur Stellæ fixæ, quæ vergunt ad Septemtrionem, ijs, quæ tendunt ad Auſtrum.

Sexta declinatio, nam etiam ſtellæ fixæ habentes declinationem Septemtrionalem præponuntur alijs, quæ habent Auſtralem.

Septima poſitio in domibus cæleſtibus, nam ſunt efficaces, quæ ſunt in domorum initijs, & potentiores, quæ Medium cœli, Horoſcopum, ac ſeptimam Domum percurrunt,

Octaua Ortus, & Occaſus, Verticalitas, nempè ſi in Vertice alicuius loci, quia ſic in eo loco ſunt potentiores, & Horizontalitas, ſcilicet ſi alicuius loci horizontalem circumferētiam ambiunt, huiuſcemodi enim quoque ibidem potentiores cognoſcuntur.

Nona habitudo ſtellarum fixarum cum ☉, cæteriſque Planetis.

Hæcque habitudo modis decem contingere poteſt:

Primus: ſi ſecundum ſolam longitudinem cum Planetis copulentur.

Secundus: ſi in exacto Planetarum Antiſcio reperiantur.

Tertius: ſi in radijs Planetarum conſtituantur:

Quartus: ſi ſimul oriantur, aut occidant ſtella fixa, ac Planeta, vel plures.

Quintus: ſi ſimul medium, vel Imum cœli perluſtrent ſtella fixa, & Planeta, ſeu plures.

Sextus: ſi oriente ☉, vel altero quolibet Planetarum occidat ſtella fixa, vel plures.

Septimus: ſi occidente Planeta, oritur ſtella fixa, vel plures.

Octauus: ſi ☉, vel Planeta cœlum mediante ſtella fixa oritur, aut occidit.

Nonus: ſi Planetâ exoriente, vel occidente, ſtella fixa medium, vel Imum cœli percurrit.

Vltimò ſi ſtellæ fixæ plures, aut vna in eodem circulo Poſitionis cum Planeta, vel Planetis exiſtant.

De Ortu, & Occaſu Stellarum fixarum quoad Solem, & cæteros Planetas.

PVNCTVM LXXXIII.

QVoad Solem Ortus, & Occaſus ſtellarum fixarum duplex intelligitur.

Alius namque Coſmicus eſt, ſiue Mundanus, & matutinus, alterq; eſt Acronycus, aut Veſpertinus.

Atque vterque ſeu verus eſt, vel Heliacus, ſeu apparens:

Matutinus verus Ortus fit cum Stella oritur eodem momento, quo ☉ etiam oritur, & matutinus ortus heliacus contingit, cum Stella ſub radijs ☉, parum ante ☉ ortum ſe conſpiciendam exhibet.

Matutinus autem Occaſus verus eſt, quando Sole Oriente ſtella in loco ad ipſum diametrali occidit, & Heliacus matutinus Occaſus fit quando primũ ſtella oppoſita ob radios Orientis Solis oculis noſtris diſparet.

Veſpertinus exortus verus eſt quoties Occidente Sole ſtella oritur, apparenſque exortus veſpertinus fit cum primum ſtella, quæ intra ſolares radios latuerat, occidente Sole, ex oppoſito emergit, ac inſpicitur.

Veſpertinus tandem Occaſus verus contingit cum Stella ſimul cum Sole occidit, veſpertinus vero occaſus heliacus euenit cum Stella, quæ parum poſt Solis occaſum aſpiciebatur, incipit ſub radijs occidentis Solis occultari.

Pro noſcendis temporibus, quibus ſtellæ fixæ has habitudines cum ☉ ſortientur ſupputa earumdem Aſcenſiones, & deſcenſiones obliquas ad eleuationem poli tuæ Ciuitatis, alteriuſue loci, & per punctum 28. & 29.

Secundò cognoſcatur etiam, quæ portio Eclipticæ in eadem loci tui eleuatione poli competat inuentæ Aſcenſioni oliquæ per punctum 34.

Tertiò denique eamdem portionem Eclipticæ confer cum loco ☉ per

ephe-

ephemerides cognito, & habebis optatum momentum.

Exempli gratia Stella fixa, quæ dicitur cor ♌, aut Regulus Anno 1700 completo erit iuxta noſtram hypotheſim in gr. 25. 39'. ♌. cum latitudine Boreali gr. o. min. 31. ideoque eius Aſcenſio obliqua in altitudine poli gr. 44. min. 29. erit gr. 134. 28., cui in eadem poli Altitudine competunt gr. 25. 23'. ♌ pro Ortu: igitur die 19. Auguſti anno 1701. ☉ orietur cum Regulo ortu vero matutino.

Inſuper eiuſdem ſtellæ fixæ deſcenſio obliqua erit gr. 161. 46', cui competent gr. 26. 51'. ♌, & ſic die 20. Auguſti dicto Anno 1701. propoſita ſtella fixa occidet cum ☉, Occaſu vero veſpertino.

Hicque notabunt Tyrones, quod pro inuenienda portione Eclipticæ competente datæ Aſcenſioni obliquæ in Altitudine poli gr. 44. 29'. poſſunt vti ſimpliciter columna primæ Domus in Tabulis Domorum quia reducta in horas &c. data obliqua Aſcenſione, factoque additis hor. 18. & vbi oportuerit detractis hor. 24. fient horæ &c. quæ quæſitæ per dictas Domorum Tabulas exhibebunt quæſitam Eclipticæ portionem: verbi gratia ſupradictæ ſtellæ fixæ Aſcenſio obliqua fuit inuenta gr. 134. 28', quæ in horis eſt h. 8. 57'. 52''. his addo h. 18. fiuntque 26. 57'. 52''. ſed detractis h. 24. remanent h. 2. 57'. 52''. cum quibus habentur in Tabulis Domorum ſub columna Horoſcopi gr. 25. 23. ♌.

Pro alijs poli Altitudinibus neceſſariæ erunt æquationes Domus primæ, de qua ſupra memorauimus.

Ac huiuſcemodi quoque inueniri poterit portio Eclipticæ congruens datæ obliquæ deſcenſioni, ſeruato tamen hoc ordine:

Quoniam regula eſt, vt pro inuenienda portione Eclipticæ datæ obliquæ deſcenſioni competenti, addantur eidem datæ deſcenſioni gr. 180. & deinde producti, tamquam ſi eſſet obliqua Aſcenſio quæratur vt ſupra, portio Zodiaci competens, à qua detrahi debent ſigna ſex, vt ſit vera portio Eclipticæ deſcenſioni obliquæ datæ conueniens,

Ideò, iuxta ſuperiora, reductæ in horas &c. Aſcenſioni obliquæ datæ, eſſent addendæ per regulam prædictam horæ 12. loco grad. 180. deinde etiam per antecedentem regulam h. 18. nihilominus ratione exceſſus ad h. 24. ſat erit ſi reductæ in horas &c. deſcenſioni obliquæ datæ, addantur horæ ſex, & per productum quæratur portio Eclipticæ prout factum fuit in inuenienda ea competenti Aſcenſioni obliquæ, nam ab inuenta Eclipticæ portione ſubtractis ſex ſignis, in reſiduo erit quæſita portio Eclipticæ competens datæ deſcenſioni: exempli cauſa: fuit ſupra deſcenſio obliqua Reguli gr. 161. 46. quæ in horas &c. eſt h. 10. 47'. 4''.

additis horis ſex, fit h. 16. 47'. 4''. per quas in Tabulis domorum ſub columna Horoſcopi habentur gr. 26. 51'. ♒. à quibus detrahendo ſigna ſex remanent gr. 26. 51. ♌ competentes obliquæ datæ deſcenſioni gr. 161. 46.

Sed redeundo ad antecedentia, quia iam inuenimus Regulum oriri debere cum gr. 25. 23'. ♌, ac occidere cum gr. 26. 51. eiuſdem ſigni, ideo eadem ſtella fixa veſpertino vero orietur circa diem 13. Februarij, quando ☉ erit propè gr. 25. ♒ oppoſiti ſtellæ ſigni; Matutino deniq; occidet circa diem 15. Februarij cum ☉ ex aduerſo ſtellæ ſigno in conſimili gr. 27. ♒ occaſus ſtellæ gradu reperietur.

Cæterum conſulto hic omittimus explicationem habitudinum Heliacarum ſiue apparentium, quoniam Arcus, quo Stella è radijs ſolaribus emergit aut intra quos occultatur, ratione magnitudinis Stellæ, partiumq; Cœli vbique variatur, ideòque à Scientiæ Candidatis non ita facile percipi poſſet.

Pro antecedentibus habitudinibns ſtellarum fixarum cum cæteris Errantibus ſume pariter Planetæ Aſcenſionem, obliquamq; deſcenſionem tuæ Poli Altitudini competentem per ſupradicta puncta 28. & 29. obſeruata eiuſdem vera latitudine, nec non cape portionem Eclipticę cōpetentem inuentæ Aſcenſioni, & deſcenſioni obliquæ Planetæ, ſicuti ac Stellæ fixæ, deindè conferatur portio Eclipticæ congruens ortui, & Occaſui Stellæ fixæ, cum portione Eclipticæ debitæ ortui, ac Occaſui Planetæ, aut conferatur ſimul Aſcenſio, & deſcenſio obliqua Planetæ cum Aſcenſione, ac obliqua deſcenſione ſtellæ fixæ, quia ſic optime patebit quanto ſpatio ortus, vel Occaſus retardabitur, ſiue anticipabitur.

Facilius tamen, minorique laboris tædio paratam habeas tabulam Aſcēſionum obliquarum Altitudini poli tui accomodatam, quia ſic omnia breuiter expedies.

Exemplum: Anno 1700. completo habebit Antares ſiue cor ♏ gr. 5. min. 35. ♐ cum latitudine Auſtrali gr. 4. min. 26. vnde eius obliqua Aſcenſio in Altitudine poli gr. 44. min. 29. erit gr. 270. min. 57. ac obliqua deſcenſio gr. 214. min. 39; portio Eclipticæ illi competens grad. 9. 23. ♐ huicque gr. 27. 27. ♏, quare orietur cum gr. 9. 23. ♐ Occidet cum gr. 27. 27. ♏ Anno 1700. initio Menſis Septembris percurret ♂ gr. 9. 23'. ♐ cum latitudine Meridionali gr. 2. quære igitur Aſcenſionem obliquam cordis ♏ gr. 270. min. 57. in Tabula Aſcenſionum obliquarum in Altitudine poli gr. 44. min. 29. vbi erit titulus gr. 2. latitudinis Meridionalis, & inuenies in latere gr. 8. ♐ igitur ortus ♂ erit cum hac ſtel-

ſtella fixa quando ♂ percurret gr. 8. circiter ♏ cum dicta latitudine gr. 2. M. pro exactiori operatione vti poteris partibus proportionalibus, pariterque occaſus ♂ cum eadem Stella fixa, extante ipſo in gr. 27. ♎ vt in principio Anni 1700. cum latitudine S. in ephemeridibus adnotata.

Et quamquam ſupputatæ fuerint Aſcenſio, ac Deſcenſio obliqua Antares ad Annum 1700. completum, citra errorem notabilem tamen poteris quoque eiſdem vti ad initium, & per eumdem totum Annum 1700. ſicuti etiam in alijs, & patebit ex infra congerendis.

De Mediatione Cœli Stellarum fixarum cum Sole, cæteriſque Planetis, necnon de' Horizontalitate ac Verticalitate earumdem fixarum.

PVNCTVM LXXXIV.

MEdiatio cœli, aut culminatio ſtellarum fixarum reſpectu rectarum Aſcenſionum examinatur cum ☉ cæteriſque Planetis ſicuti ſupra examinati fuerunt earumdem Ortus, & Occaſus cum ☉, alijſque Planetis, ideò fruſtra operationes repetere.

Definiuimus in præcedenti capite Horizontalitatem, ac Verticalitatem Stellarum fixarum, ideò reſtat hìc modum eas cognoſcendi ſuper addere.

Quo ad Horizontalitatem ſubtrahenda eſt primò latitudo loci à quadrante cœleſti, & quod fiet reſiduum complementum erit eiuſdem latitudinis.

Secundo adnotanda eſt inerrantium Stellarum declinatio cum ſuis denominationibus, videlicet an ſint Auſtrales, vel Boreales.

Tertio conferēdum eſt inuentum complemētum latitudinis loci cum declinationibus earumdem Stellarum fixarum.

Quia ſi declinatio Stellæ fixæ cum eadem denominatione erit æqualis complemento latitudinis loci, ea ſtella circumferentiam Horizontis loci eiuſdem ambiet, ac huiuſcemodi ſtellæ ambientes circumferentiam Horizontis appellantur ſtellæ horizontales.

Si verò declinatio Stellæ erit cum aduerſa denominatione, hoc eſt cum denominatione poli à loco non viſibilis, eritque maior complemento latitudinis loci, eadem Stella infra Horizontem, & ſubtus terram manebit.

At ſi declinatio Stellæ erit cum eadem denominatione poli viſibilis, & ſu-

& ſupradicto complemento maior, eadem Stella ſemper ſupra loci hemiſphærium extabit:

Qui ſunt caſus ab Aſtrologis tantum conſiderati, & optimè demonſtrantur in Sphæra, & Globo cœleſti

De verticalibus autem Stellis, quæ ſcilicet ſingulis diebus loci verticem pertranſeunt, fiuntque loco perpendiculares, notitia habebitur auxilio Altitudinis Poli loci, pariterque ope declinationis earumdem Stellarum fixarum:

Si etenim Altitudo dicta poli viſi, ac declinatio Stellæ fixæ habebunt eamdem denominationem, & æquales erunt, ea Stella dubio procul erit loco verticalis, & perpendicularis.

Exemplificentur hæc pro Ciuitate Firmi, Metropoli Piceni, cuius Horizōtem clariſſima Azzolinæ Gentis ſydera gentilitia circum ambierunt Ortus momento vtriuſq; Decij Azzolini S. R. E. Cardinalium ampliſſimorum qui iure merito illuſtrauerunt, & nunc Romani Cœli Verticem illuſtrant, & quæ nobiliſſima Ciuitas quoque Patria eſt D. mei Comitis Io: Philippi Spinucij Viri ſpectatiſsimi, ac multiplici ſcientiarum cruditione inſignis meritoque hodie Ciuitatis Imolæ Gubernatoris ſolertiſsimi, maiorum munerum egregia Virtute ſua digni, & capacis, quì hos ſuſceptos labores publico Candidatorum bono in Aſtronomica Scientia ſæpè mihi commendauit, extulit, & perficere typiſque mandare benigne hortatus fuit, dum eiuſdem in eodem Gubernio per plurima tempora Vicegubernator extiti.

Altitudinem poli Ciuitatis Firmi ſcripſerunt Argolus, Montebrunus, alijque plures, & ego quoque in tomo primo mearum Ephemeridum de Anno 1675. eſſe gr. 43. min. 9. ſicuti etiam in præſenti Volumine, quare complementum huius Altitudinis Poli erit gr. 46. min. 51. cum quibus gr. 43. min. 9. & gr. 46. min. 51. conſiderando declinationes cuiuslibet Stellæ fixæ eidem complemento proximiores, iuxta traditionem Tychonicam ab Argolo ſupputatam in Tabula Stellarum fixarum poſita in primo Tomo eius Ephemeridum, inuenio declinationem Stellæ fixæ Vltimæ trium dextri pedis Perſei gr. 46. min. 34. cum denominatione Poli à Firmo viſi, borcali; nec non declinationem Capellæ cum eadem denominatione gr. 46. min. 34. eſtque Stella primæ magnitudinis, quare hæ ſtellæ fixæ quàm proxime ambiunt Firmi Horizontem, & de die in diem magis Horizontem eumdem attingent, ſunt enim in parte cœli eæ ſtellæ fixæ, qua neceſſario augeri debent earumdem declinationes, & huiuſcemodi fieri æquales penitùs Atitudinis poli complemento. Cum

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Cum Altitudine poli gr. 43. min. 9. inſpicio ſatis optime congruere hiſce temporibus declinationem borealem Stellę fixę, quę dicitur Auſtralis in ſiniſtro pede poſteriori Vrſę maioris, ideò Stella hęc Firmi verticem pertranſit.

Atque ex his aliarum regularum exempla patent.

Pro habenda Stellarum fixarum longitudine ad quodcumque tempus.

PVNCTVM LXXXV.

VT poſsit haberi horum fixorum ſyderum longitudo extra annum 1700. completum, ſic poterit operari pro nunc: dematur datus annus, quo debet inquiri longitudo fixarum ab anno 1700. ſi hoc minor ſit, vel ſubtrhantur 1700. ab altero, ſi ſit maior, ſemperque reliquum multiplicetur per 51. ſecundas, & productum addatur poſitę longitudini ſtellę, ſi annus excedat annum 1700. vel auferatur, ſi hoc erit minor, & acquiretur vera ſtellę longitudo; vt exempli gratia quæratur longitudo pedis ſiniſtri lucidi Orionis anno completo 1680. demendo annum 1680. à 1700. fiunt anni 20. qui multiplicati per 51. dant ſecund. 1020. aut ſolum minuta 17. quę ſubtracta à loco ſtellę Rigel dictę ♊ 12. 37'. fit ipſius verus locus anno completo 1680. in ♊ gr. 12. 20. hicque maiorem ſubtilitatem adhibere omnino, & pro loco fixarum etiam ad menſem fere incaſſum videtur.

Cætera adnotanda in gratiam cœleſtis figuræ.

PVNCTVM LXXXVI.

PRętermitto pręcepta de Hylech, & Apheta, Arabis verbis, ſignificantibus lucis dationem, quod poſsint eſſe ſolum ☉, ☽, & aſcendens, & pretermitto, quod in figuris diurnis conſiderandus ſit locus ☉, qui ſi inueniatur in horoſcopo, MC, vndecima, ſeptima, aut nona domo, poſsit eſſe Hylech, quod cęteris in domibus eſſe non poſsit: Quod in figuris nocturnis, ſi in vna ſupradictarum domorum reperiatur ☽, ipſa ſit Hylech, ſic etiam ſi ſit in quarta, quinta, & non in cæteris. Quod ſi in figuris diurnis ☉ non poſsit Hylech, & ☽ eſſe poſsit, ipſa ſit Hylech, ſic quando in nocturnus ☽ non poſsit, & poſsit ☉, ipſe ſit Apheta. Quod ſi vtrumque luminarium ſit incapax ad eſſe Hylech accipiatur pro Apheta

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ta locus horoſcopi, quod rationabiliter excludatur ⊕; prætermitto & verba de Alcochoden ſignificante longitudinis datorem, qui ſit dominus domus loci Hylech, quia mors, & vita in manu Domini, ſolus Deus noſter Apheta eſt, & noſter Alcochoden.

Dominus figuræ ab Arabibus Almuten, aut vincens eſt ille, qui plures habet in figura cœleſti dignitates; ſupputando igitur, qualis ſit Planeta, qui plures habuerit dignitates, coronari poterit Dominus figuræ, qui ſic inuenietur.

Planeta habens in propria domo locum hylegialem, habet 5. dignitates, ſi in propria exaltatione 4, in triplicitate 3, in termido 2, & in facie vnicam dignitatem.

Loca hylegialia ſunt ☉, ☽, Aſc., MC, ⊕, præc. ☍, aut ☌. His cognitis adeunda eſt tabula, oſtendens domus, exaltationes, &c. Planetarum, vt in puncto 18. & per hanc, vt infra proſequi licebit, inueniendo Almuten appoſitæ exemplaris figuræ primæ.

		5	4	3	2	1
		Domus,	Exaltatio,	Triplicitas,	Terminus,	Facies.
☉ gr.	5.54. ♍	☿	☿	♀ ☽ ♄	☿	☉
☽ gr.	4.56. ♎	♀	♄	♄ ☿ ♃	♄	☽
⊕	28. 2. ♐	♃		☉ ♃ ♂	♂	♄
Præc. ☌	3. 18. ♍	☿	☿	♀ ☽. ♄	☿	☉
MC.	16. 38. ♍	☿	☿	♀ ☽ ♄	♀	♀
Aſc.	29. 0. ♏	♂		♂ ♀ ☽	♄	♀

Quia ☉ eſt in ♍, & in domo, & ☿ exaltatione, & termino, quare ☿ habet in loco ☉ dignitates 11. &c. hoc modo dignitates Planetarum paulatim ſupputentur, & agnoſcetur ♄ cum 21. dignitatibus ♃ 11. ♂ 13. ☉ 5. ♀ 21. ☿ 34. ☽ 13. vndè huius figuræ cæleſtis Almuten eligitur ☿, & dominus principalis conſtituitur.

Animaduertendumque, quod in terminis, & faciebus numeri, qui ſunt apud Planetas connotant talem Planetam eſſe dominum illius termini aut faciei, vt eſt quantitas appoſita graduum, vt exempli gratia gradus 30. ♈ dominatur ♃ vſque ad 6. gradus, quibus confectis occurrit ♀ domina à gr. 6. vſque ad 12. dein ☿ vſque ad 20. & à 20. ♂ vſq; ad 25. & à 25. ♄ vſque ad gr. 30. completos, & ſic de alijs.

Collega ſit ille Planeta, qui vltra Almuten maiores habet dignitates; vnde hic eſſet collega Domini ☿ Saturnus, & Venus.

Figu-

Figuram cœleſtem in ipſo Meridiei puncto erigere.

PVNCTVM LXXXVII.

SI notum ſit vere eſſe meridiei tempus illud, quo erigi debet cęleſtis figura, per tabulas erit notus locus ☉ in ipſo meridiei momento, qui ſub columna decima quæſitus, & adhibendo, ſi neceſſe ſit partem proportionalem, exhibebit in fronte horas, in latere minuta, & proportionabiliter ſecundas aſcenſionis rectæ MC, cum qua per antedicta conſtrui poterit figura cœleſtis, quod patere poteſt, nam cum Sol eſt in vero puncto meridiei, tunc ineſſe debet præcisè domui decimæ, & meridiano; & maioris gratia facilitatis adnotetur punctum 76.

Data aliqua domorum cœleſtium reliquas inuenire.

PVNCTVM LXXXVIII.

SI domus, aut pars Zodiaci competens vni domui nota ſit, aut data, & ſit vna partis Aſcendentis, quæretur per tabulas domorum ſub propria columna, nempè tertiæ ſi ſit tertia, ſecundæ ſi ſecu nda &c. atque ſi ſit vna ex deſcendentibus ſumetur domus oppoſita aſcendens, & ſignum oppoſitum, quod erit quærendum, vt ſupra, & per antecedens punctum huius finis patebit.

Cognita Meridiani Aſcenſione recta & Solis, horas reperire poſt Meridiem.

PVNCTVM LXXXIX.

SVbducatur ſemper aſcenſio recta Solis ab ea M.C. cum gr. 360. ſi neceſſe ſit, & productum quod erit in gradus æquatoris auxilio puncti 25. dabit horas, & alias minutias P.M. vt exempli gratia ſi da a ſit recta aſcenſio M.C. gr. 167. 22. & ☉ gr. 157. 42. habebitur harum differentia in gradus æquatoris grad. 10. 0. quibus competunt horæ 0. min. 40.

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An Stella quæuis ſit in parte Cœli Orientali, ſeu Occidentali cognoſcere; inſuper an in parte aſcendenti, aut deſcendenti, ſupra, vel infrà Terram, & in qua Cœli domo.

PVNCTVM LXXXX.

QVæratur ſtellæ diſtantia à Meridiano, & ipſius arcus ſeminoctur-nus, aut ſemidiurnus per ſuperiora his inuentus; ſi ſtellæ diſtantia à meridiano nulla erit, ipſa ſtella pronunciabitur in meridiano, ſi erit gr. 180. præcisè angulum terræ ſtella ipſa occupabit, ſi erit minor grad. 180. erit in parte deſcendenti, ſi maior in aſcendenti.

Amplius ſi diſtantia ſtellæ à meridiano æqualis erit arcui ſemidiurno, aut ſeminocturno ſtellæ, ipſa erit in linea occidentis, atq; ſi ad complendam ſtellæ diſtantiam à meridiano, hoc eſt ad complendam ipſius reuolutionem, ſatis erit, nec maior, aut minor dictus arcus, ipſa erit in ortu.

Etiam ſi ſtellæ dicta diſtantia minor fuerit ipſius arcu ſemidiurno, aut ſeminocturno, ſtella erit in parte cœli meridionali; ſi maior, non excedendo tamen ſemicirculum erit in occidentali; & ſi ſemicirculum excedet, ita tamen vt ad terminandam ſtellæ reuolutionem, quod eſt à gradibus diſtantiæ ſtellæ à meridiano, & grad. 360. non ſit æquale arcui ſtellę ſemidiurno, aut ſi habebit, ſeminocturno, neq; ſit minus, ſtella erit in parte cœli ſeptemtrionali, vnde ſi eſſet minus, erit in orientali, ac ſi ęquale in puncto orientis.

Pariter ſi diſtantia ſtellę à meridiano erit minor gr. 30. erit in nona domo, ſi 60. in octaua, ſi 90. in ſeptima, ſi 120. in ſexta, &c. &. ſi gradus diſtantię æquales erunt verè dictis gradibus, dicetur ſtella in cuſpide domus nonę, octauę, &c.

Quibus cognitis, cum pars ſupra terram ſit ab ortu per meridiem ad Occidentem, & reliqua ſit pars infra terram, poterit ex dictis inferri, an ſtella ſit ſupra, vel infra terram, & hęc omnia patent ex omnibus multis antecedenter collectis.

De directionibus in genere.

PVNCTVM LXXXXI.

OPerationibus Aſtrologicis principaliter duo debentur, nempè ſpecies, & tempus, eaq; cognoſcitur à cœleſti figura, & tempus per directiones; vnde eſt, quod cum egerimus de ſuperna figura, liceat & de eius directionibus ſermonem adiungere.

Directio eſt motus primi mobilis, quo aliquod cœli punctum ad aliud traducitur, & dirigere nihil aliud eſt quam mouere Sphęram vſque quo locus alicuius cœleſtis puncti perueniat ad locum alterius.

Significatores dicuntur ea puncta cœli, quę moueri intelliguntur, & promiſſores ea puncta, quę à ſignificatoribus percurruntur, vt ſi ☉ intelligatur ferri à primo mobili ad ♃, ☉ erit ſignificator, & ♃ promiſſor, & è contrariò.

Arcus directionis eſt arcus ęquatoris à Significatore, & Promiſſore interceptus. Duplex apud Aſtrologos oritur directio, vna quidem, quę eſt ſecundum ſignorum ſucceſsionem, & dicitur directio directa, & altera, quę fit contra ſignorum ſucceſsionem, & vocatur directio conuerſa; ideoque notandum, quod cum Planetę poſsint eſſe & directi, & retrogradi diuerſo modo diriguntur: nam directi ſolent dirigi directione directa, & retrogradi conuerſa.

Et quamquam cuſpides omnes domuum, partes, & puncta quælibet, & Planetæ ſignificatores eſſe poſſint in qualibet figura Cœlorum, non eſt, quod principaliores ab Aſtrologis non adducantur, nempe ☉ ☽ ⊕, gradus, & minutum Aſcendens, & Medium Cœli.

Medium cœlum, & Aſcendens, & cæteras cuſpides directè dirigere.

PVNCTVM LXXXXII.

QVia ſemper à facilioribus exordiendum eſt, incipio exponere modum dirigendi medij cœli, poſtea Aſcendentis, & deinde cæterarum cuſpidum domorum, multa enim alia requiruntur ad directiones Planetarum, & partium in his non exiſtentium.

Pro dirigendo medio Cœli: Inuenta ipſius aſcenſio recta per punctum 33. ſubducatur ab Aſcenſione recta inuenta per punctum 26. puncti Cę-

leſtis, ad quod ferri medium Cœlum ſecundum ordinem ſignorum intelligitur, & proueniet arcus quæſitus directionis.

Et, hoc vt faciliùs innoteſcat, adnotabitur, quod Aſtrologicum ſpeculum inſeruit cognitioni motus ſignificatorum, vt hic M.C. quod cum accidat in grad. 16. 38. ♍ ſuo correſpondenti loco collocatur in ♍, & aſpicitur motum ipſius in △ ♃ impingere per directam directionem, deinde in corpus ☼ &c. at per conuerſam directionem in gr. 7. 45. ♍ vbi eſt ♂ in gr. 5. 24. ♍ vbi eſt ☼, deinde ad ♀, ☿ &c.

Quæratur arcus directionis MC, & △ ♃ primò per tabulas

Aſcenſio recta △ ♃ in gr. 18. 20. ♍ vbi fit, horæ		11.	17'.	8''.
Aſcenſio recta MC inuenta, vt ſupra horarum		11.	10.	49.
Tempus, & arcus directionis	horarum	0.	6.	19.

nempe lapſis Anno, & diebus 212. circiter poſt tempus figuræ incurret medium Cœli △ ♃ nam ſi minuta 4. ſemper dant integrum annum Solarem, horum minuta 6. 19. dabunt eorumdem dies 212. per auream regulam; ſic hora integra annos quindecim, duæ horæ annos triginta &c.

Trigonometricè	fuit aſcenſio recta M.C.	gr.	167.	42.
Eſtque	aſcenſio recta △ ♃	gr.	169.	17.
Tempus, & Arcus directionis		gr.	1.	35.

Hoc eſt Annum, & Menſes ſeptem à natiuitate, nam hìc gradus quilibet æquatoris deſignat annum integrum ſolarem, vnde minuta 5. menſem, &c.

Huiuſcemodi ferè Horoſcopus, & Aſcendens dirigetur, arcuſq; directionis habebitur, ſi aſcenſio medij Cœli ſubtrahatur ab altera Promiſſoris ſic inuenienda per tabulas domorum: ſub columna domus primæ quæratur promiſſoris locus vſquequò reperiatur, & inuentus, in fronte horas, in latere minuta, & cum porportione ſecundas aſcenſionis exhibebit, à quibus fiet neceſsaria ſubtractio.

Horoſcopus aut Aſcendens, dirigendus ſit ad □ ☿, quod immediatè incurrit. Accipiatur retrocedendo ſub columna primæ inſcripta *Horoſcopus* vſque quo reperiantur gr. 1. 23'. ♐, & adhibita proportione inuenietur aſcenſio dicti □ hor. 11. 13. 10., à qua dempta aſcenſione M.C. hor. 11. 10. 49''. habetur tempus, & arcus directionis hor. 0. 12. 21. hoc eſt annis 3. & diebus circiter 32.

Altera via hæc habebitur directio ſi addantur aſcenſioni rectæ M.C. gr. 90. vt fiat obliqua aſcendentis ſemper ſubtrahenda ab aſcenſione obliqua Promiſſoris ad polum aſcendentis ſignificatoris nempe, vt hic gr. 44. 29'.; fuit ſupra M.C. aſcenſio recta grad. 167. 42. ergo obliqua

aſcen-

aſcendentis gr. 257. 42'. ſed per punctum 28. habetur obliqua aſcenſio □☿ in gr. 1. 23. ♐ gr. 260. 48'. quare, & arcus directionis, & tempus gr. 3. 16. ſcilicet annis 3. menſe 1. & aliquibus diebus à tempore Cœleſtis appoſitæ figuræ.

Pro dirigendis 4. aſcendentibus domuum cuſpidibus ſcietur, quod eorum aſcenſionibus obliquis æquiualet inuenta recta M.C. ideò ſat erit obliquam aſcenſionem illius puncti ad quod vult dirigi illa cuſpis reperire, quæ ſic inuenietur. Si velit dirigi domus vndecima, ſub domo, & columna vndecimæ quæretur aſcenſio obliqua ſicuti in antedictis, & ab hac ſubtrahetur aſcenſio MC, vt fiat quæſitus arcus directionis; ſimiliter ſi dirigenda ſit cuſpis duodecimæ, illius puncti, quod duodecimæ cuſpis incurrit, ſumetur aſcenſio, at ſub duodecima, & ſic quando cuſpis tertiæ dirigenda erit ſub tertia, pariter, & de ſecunda &c.

Alio modo: ſi dirigenda erit cuſpis vndecimæ, addentur aſcenſioni rectæ M.C. gr. 30. & fiet obliqua illius domus, hæc demetur ab obliqua puncti ad quod dirigitur domus, & orietur tempus, & arcus quæſitus directionis, & ſimiliter in his omnibus 4. cuſpidibus excepto hoc, quod ad habendam aſcenſionem obliquam duodecimæ addendi ſunt gr. 60. aſcenſioni rectæ M.C. ſi domus ſecundæ gr. 120. ſi tertiæ gr. 150.

Pro cæteris domibus deſcendentibus dirigendis inquiretur obliqua deſcenſio domus ingrediendo tabulas domorum ſub columna domus cui opponuntur, ſi enim indaganda eſſet deſcenſio, quæ ſemper dicetur obliqua quintæ domus, cum quintæ domui oppoſita ſit vndecima, ſi ſub columna vndecimæ quærentur gradus quintæ, habebitur deſcenſio obliqua ſemper ſubtrahenda ab aſcēſione illius puncti, ad quod quinta domus cupit dirigi vt ſit arcus directionis: ſic etiam ſi quærenda eſſet deſcenſio ſextæ, ſub columna duodecimæ, ſeptimæ ſub columna primæ, octauæ ſub ſecundæ, nonæ ſub tertiæ.

Not. quod aſcenſio quartæ domus, quę recta dicetur, habetur coniungendo h. 12. ei M.C. vnde cum recta M.C. ſit h. 11. 45'. 49''. in noſtro caſu recta quartę domus erit h. 23. 10. 49''.

Quamlibet Stellam extrà caſus antecedentes dirigere ſecundùm ordinem ſignorum.

PVNCTVM LXXXXIII.

NIſi ſtella dirigenda fuerit in aliqua cuſpide, itaut dirigenda per regulas antedictas, quęretur ſtellę, aut puncti cœleſtis circulus poſitio-

ſitionis per punctum 36. aut 37. attenta eleuatione poli figurę.

Deinde ſupputabitur in ſuo circulo poſitionis aſcenſio obliqua ſtellæ ſi fuerit in parte aſcendenti, aut ſumetur aſcenſio loci oppoſiti ſtellę ſi fuerit in deſcendenti, & hęc ſemper ſubtrahetur ab ea promiſſoris intellecti in circulo poſitionis ſtellę, & prodibit arcus directionis. Dirigendus ſit ☉ in expoſita figura ad corpus ♂.

Quia ☉ eſt in gr. 5.54. ♍ in parte deſcendenti, ideò ſumitur aſcenſio loci oppoſiti ☉ nempe gr. 5.54. ♓, & inuenitur gr. 339.5. pariter inuenitur aſcenſio obliqua ♂ ♂ in gr. 7.45. ♓ gr. 340.43'. in circulo poſitionis ☉ ſupra puncto 36. inuento gr. 8.22'. & habetur arcus directionis gr. 1.38. hoc eſt poſt annum, menſes 7., & dies 18.

Per tabulas pariter in his caſibus ſumendus erit ſtellę dirigendę circulus poſitionis per punctum 36. aut 37. poſtea declinatio per punctum 24. accipienda erit illius puncti ad quod vult ſtella dirigi, ſicuti & aſcenſio recta per punctum 26. Deinde per declinationem cum ſuis titulis accipietur diſtantia à Meridiano, ſub tanto circulo poſitionis, quanto iam fuit inuentum habuiſſe ſtellam dirigendam, adhibita ſemper proportionali parte pro graduum fractionibus; eaque diſtantia, ſi ſtella dirigenda erit in eadem cœli medietate, ac ſit ſtella ad quam vult dirigi, ſubtrahenda erit à diſtantia excerpta à Meridiano, vel quarta domo: attamen addenda ſit fuerint in diuerſa cœlorum medietate, hoc eſt ſignificator in parte aſcendenti, & Promiſſor in aſcendenti, & erit quæſitus ex tabulis arcus directionis, vt hic abſque alia ſuppoſitione.

Aſcenſio recta ♂	h. 10. 37'. 45''.
Aſcenſio recta M.C.	h. 11. 10. 49.
Diſtantia ♂ à M.C.	h. 0. 33. 4.
Declinatio ♂ Septemtrionalis ſupra terram	gr. 8. 41.

Cui declinationi competit ſub circulo poſitionis ☉ gr. 8.22. ſupra inuento in puncto 36. diſtantia ♂ à meridiano h. 0. 39. 36. à qua ſubducetur diſtantia ♂ accepta, vt ſupra à M.C. fietque arcus directionis hor. 0.6.32. nempè poſt annum, & dies 232. ☉ aſſequererur ♂.

Etiam in gratiam facilioris, & felicioris intellectionis tabularum inquirendum ſit quanto tempore ☉ adiret corpus ☽, quod offenderet poſt ♂, poſt MC. & △ ♃, & in hoc exemplo adnotandum eſt, quod quia ☉, & ☽ ſunt in cœli medietate diuerſa, nempe ☉ in deſcendenti, & ☽ in Aſcendenti, diſtantiæ coniungi debent pro habendo arcu directionis, vt in ſequenti.

Aſcen-

Aſcenſio recta ☽	h. 12. 18'. 7''.
Aſcenſio recta M. C.	h. 11. 10. 49.
Diſtantia ☽ à M. C.	A h. 1. 7. 18.
Declinatio ☽ Meridiana ſupra terram	gr. 1. 58.
Et huic competit diſtantia horarum	B h. 0. 33. 18.

Sub circulo poſitionis ☉ gr. 8. 22. per punctum 36. quare addendo diſtantias A B. vt debetur, erit arcus directionis quæſitus h. 1. 40. 36''. nempè Annis 25. diebus 55. & huiuſmodi in alijs ſimilibus.

Animaduerſiones ſuper prædictis.

PVNCTVM LXXXXIV.

QVod dictum eſt de ſtellis, intelligi & poterit de quibuslibet cœli punctis ad placitum.

Quia ſemper aſcenſio ſignificatoris ſubtrahi debet ab ea Promiſſoris, ſi eueniat, quod ea Promiſſoris ſit minor altera, vtendo tabulis addentur horæ 24. aſcenſioni Promiſſoris, aut gr. 360. adhibendo trigonometriam, vel primorum mobilium tabulas.

Cum ſignificator eſt in vna cœli medietate, Promiſſor autem in altera, diſtantiæ à Meridiano adduntur, quia ſignificator ſecundum locum proprium diſtat à Meridie ad vnam partem, & ſecundum locum Promiſſor diſtat ab eodem Meridie ad aliam partem, vnde pro habenda diſtantia vtriuſque loci, à qua menſuratur arcus directionis, nam hic eſt quantitas arcus æquinoctialis inter ſignificatorem, & Promiſſorem, oportet ambas addere diſtantias.

Petentian hiſce in directionibus melius ſit aſſerere Promiſſorem ferri ad ſignificatorem, an ſignificatorem ad Promiſſorem congrua reſpõſio videtur vtrumque benè concludi poſſe, quia intelligendo Promiſſorem ferri ad ſignificatorem ratio eſſe poteſt, quod directio fit per motum primi mobilis contra ordinem ſignorum, atque intelligendo ſignificatorem ferri ad Promiſſorem ratio valebit ſi in motu directionis, vt hic, intelligatur motus ſecundum ſucceſſionem ſignorum, & eo modo quo, etſi pateat ex motu primi mobilis, quotidiana reuolutione ſtellas ferri contra Zodiacũ, concluditur communiter ſtellas proprium curſum perficere.

Quamobrem in conuerſa directione, de qua mox, ſcienter aſſiduo dicetur Promiſſor ferri ad ſignificatorem.

Mo-

PVNCTVM LXXXXV.

POſt actinobolium, motumue directionis rectum licebit methodus qua ductrice Planetæ dirigantur conuersè.

Dirigere conuersè nihil aliud importat, quam inquirere arcum æquatoris interceptum contra ſeriem ſignorum à duobus Zodiaci punctis ſecundum eorum locum in partibus cœleſtibus.

Facilimè, bene notatis ijs, quæ dicta fuerunt de recta directione conuersè dirigi poterit, nam in omnibus conueniunt præterquamquod aſpectus intelliguntur contra ordinem ſignorum, & aſcenſio Promiſſoris demitur ab ea ſignificatoris, & ea directio, quæ vno inſtanti conuerſa eſt, poterit & iudicari directa ab intelligente.

Per directionem conuerſam adiret ☼ corpus ♀ ☿ quæratur ergo tempus quo ☼ adiret corpus ☿ per hanc conuerſam directionem ex tabulis.

Aſcenſio recta M.C.	h. 11. 16. 49".
Aſcenſio recta ☿	h. 10. 13. 45.
Diſtantia ☿ à M. C.	h. 0. 57. 4.
Declinatio ☿ Septentrionalis ſuper terram	gr. 11. 1.

Cui competit diſtantia ſub circulo poſitionis ☼ gr. 8. 22. h. 0. 41'. 3". quæ, quia ſignificator, & Promiſſor ſunt in eadem medietate, demenda eſt à diſtantia, quam habet ☿ a M.C. vt fiat arcus directionis h. 0. 16. 1. & ſic de cæteris.

Dirigere ſtellas cum latitudine.

PVNCTVM LXXXXVI.

EOdem modo ſtellæ cum latitudine diriguntur ac eæ abſque latitudine, excepto hoc tantum, quod in dirigendis ſtellis cum latitudine debent earum ſumi declinationes, Aſcenſiones rectæ, & ſemper vbicumque, cum latitudine.

Addo, quod nonnulli in directione ad ſextiles aſpectus quoslibet adhibent medietatem latitudinis, & eiuſdem denominationis, in directione ad □ nullam latitudinem, ad △ mediam latitudinem, & contrariæ denominationis, & ad ☍ eamdem latitudinem cum contraria denominatione. Di-

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Dirigenda ſit ☽ obtinens grad. 1. 52'. latitudinis Septemtrionalis ad corpus ♄ cum gr. 2. 22. latitudinis Septemtrionalis ſupra terram, quod corpus ♄ incurrit poſt □ ♃. Declinatio ☽ cum latitudine Septemtrionali grad. 1. 52. in grad. 4. 56. ♎ eſt gr. 0. 14. Meridiana propter M. ſuperſtans, & ſupra terram.

Aſcenſio recta MC h. 11. 10.49'', mediatio cœli ☽ h. 12. 20. 59'', diſtantia ☽ à meridiano h. 1. 10. 10. cũ qua, & declinatione gr. 0. 14. M. elicitur circulus poſitionis ☽ gr. 16. 26. diſtantia ♄ à meridiano h. 2. 13. 39. declinatio ♄ accepta cum eius latitudine gr. 2. 22. eſt gr. 6. 21. m. per quam ſub circulo poſitionis ☽ gr. 16. 26. elicitur diſtantia h. 1. 3. 13, quæ, quia ☽, & ♄ ſunt in eadem cœli medietate, ſubtracta à diſtantia ♄ à meridiano facit arcum directionis h. 1. 10. 26.

Trigonometricè inuenietur circulus poſitionis ☽ cum latitudine, deindè eiuſdem Aſcenſio ſupputabitur in ſuo circulo poſitionis, ſicuti & promiſſoris cum Latitudine, nam pariter per ſubductionem habebitur arcus directionis, ac ſi ſtellæ fuerint in parte deſcendenti ſumetur Aſcenſio Loci oppoſiti, vt alias dictum fuit: in hoc autem exemplo ſic procedet ſupputatio.

Mediatio cœli ☽	gr. 185. 15'.
Aſcenſio recta medij cœli	gr. 167. 42.
Diſtantia ☽ à medio cœli	gr. 17. 33.
Complementum aſſumpti poli	gr. 45. 31.
Declinatio ☽	gr. 0. 14. M. 760986.
Summa	gr. 45. 45. RC. 014490.
Differentia	gr. 45. 17. L. 985162
Sèmidiſtantia à M. C.	gr. 8. 46. 30. M. 918854.
Arcus additiuus ſemidiſtantię	gr. 8. 43. M. 918506
Arcus poſitionis à M C.	gr. 17. 29. L. 947774.
Altitudo poli	gr. 44. 29. M. 999217.
Eleuatio poli ſupra circul. poſit. ☽	gr. 16. 26. M. 946991.
Differentia Aſcenſionalis ☽	gr. 0. 4. L. 707977.
Aſcenſio obliqua ☽	gr. 185. 19.
Declinatio ♄.	gr. 6. 21. M. 904643.
Differentia Aſcenſionalis ♄.	gr. 1. 53. L. 851634.
Mediatio cœli ♄.	gr. 201. 6.

Aſcenſio obliqua ♄.	gr. 202. 59.	Subtrahe
Aſcenſio obliqua ☽ vt ſupra,	gr. 185. 19.	

Et quæſitus Arcus directionis gr. 17. 40.
Hæcque tota ſupputatio porrigit animaduerſionem, quod mixta eſt omnium ſpecialium calculorum in antecedentibus punctis expreſſorū.

In his calculis bene operatum eſt,cum addita differentia aſcenſionali arcui additiuo fit ſemidiſtantia ab I. C fere vt poteſt & ſupra.

Si dirigenda ſit hoc modo aliqua ſtella, quæ eſſet in cuſpide præciſa M.C vel ipſum medium cœli dirigendum eſſet, deberet accipi mediatio cœli illius ſtellæ per punctum 27. ad quam deberet dirigi, & ab ea demi aſcenſio recta M.C vt fiat arcus directionis; Exemplum ſi M. C debeat dirigi ad △ ♃ cum propria latitudine min. 32. M.quia mediatio △ ♃ eſt h. 11. 16'. 18'', & ea M.C eſt hor. 11. 16 49''. fit arcus directionis hor. o. 5'. 29''.

Pariter ſi aliquod cæleſte punctum; quod eſſet præciſe in linea Orientali, vel ipſa linea Orientalis eſſet dirigenda ad promiſſores habentes latitudinē, ſumetur declinatio illius puncti ad quod vult dirigi per punctum 24. & cum ea declinatione ſemper in aſſumpto exemplo ſub circulo poſitionis gr. 44. 29' ſumetur diſtantia illi competens, à qua ſubtrahetur diſtantia illius puncti ad quod vult dirigi, ab Imo cœli, & fiet arcus directionis, & pro habenda diſtantia promiſſoris ab Imo cœli accipietur mediatio cœli promiſſoris Aſcendentis quæ ſubducatur ab aſcenſione recta Imi cœli, mutuatis h. 24. ſi ſit neceſſe; pro hoc dirigi debeat horoſcopus ad ✶ ☽ cadens in gr. 4. 56' ♐ cum latitudine, quæ ſemper erit ea illius Planetæ, cuius eſt aſpectus gr. 1. 52' ſeptem declinatio ✶ ☽ in gr. 4. 56. ♐ cum latit. gr. 1. 52' S. Meridiana ſub terra eſt partium 19.20, cui ſub gr. 44. 29' competit diſtantia h. 7. 20. 39''. mediatio cœli ✶ ☽ h. 16. 13'. 16'', & aſcenſio recta I.cœli eſt h. 23. 10. 49''. quare diſtantia ✶ ☽ ab Imò cœli h. 6. 57'. 33'', & hæc ſi demetur à ſuperiori diſtantia per declinationem inuenta, fiet quæſitus arcus directionis h. o 2' 3'' 6. & ex his patet poſſe, & horoſcopum dirigi, ſi accipiatur declinatio promiſſoris, & diſtantia promiſſoris ab I. C. & ab ea ſubducatur diſtantia competens inuentæ declinationi Promiſſoris, pro vero arcu directionis. Vbi verò Altitudo poli cæleſtis figuræ non fuerit gr. 44. 29', ſed diuerſa, pro dirigendo Aſcendente ad Planetas habentes latitudinem vteris methodo addendi gr. 90. Aſcenſioni rectæ M.C. vt fiat obliqua Aſcenſio Aſcendentis, deindè inuenies Aſcenſiones obli-

obliquas Promiſſorum obſeruata latitudine per punctum 28. atque huiuſcemodi quoque ſcrutaberis ſignificatorum, & Promiſſorum obliquas Aſcenſiones quando altitudo poli figuræ non erit gr. 44. 29'. hoc excepto, quod circulos poſitionis ſignificatorum debebis ſupputare per punctum. 37. in reliquis eædem ſunt operationes.

Cœleſtem Reuolutionis figuram, cum omnibus ad ipſam ſpectantibus terminare.

PVNCTVM LXXXXVII.

Reuolutio eſt regreſſus Planetæ, ſeu alterius puncti cœleſtis ad idem fermè loci, quod habuit aliquo tempore antecedēti, vt ſi ☉ fuiſſet in gr. 27. 14'. 40''. ♍ cum ☉ & quo tempore habebit rurſus gr. 27. 14. 40''. ♍.

Hoc per Ephemerides habetur facilimè quærendo, vt ex. gra. locum reuolutionis ☉ vſquequo inueniatur in Ephemeridibus, nam ſi præcisè expoſitus locus ☉ reperiatur, ſignum erit quod in ipſo Meridei inſtanti ☉ aſſequitur datam eclipticæ partē, ideoque in ipſo inſtanti meridiei, vt in ſuperioribus, erigitur figura cœleſtis quæ erit reuolutionis; at ſi præcisè non inuenietur, quærentur duo ſolis loca datum ſolis locum intercipientia, & inter ea differentia ſumetur, quæ & erit ſolis, aut alterius motus diurnus: deinde locus minor ☉ inuentus in Ephemeridibus demetur à dato, & proueniet motus diurni pars, cum quibus ſi fiet, vt motus diurnus ad h. 24. ita pars motus diurni ad horas, & harum fractiones, in his agnoſcetur tempus, quo ☉ locum datum aſſequetur P.M. diei minoris, vt ex. gra. fieri debeat reuolutio ☉ expoſitæ primæ cœleſtis figuræ in gr. 5. 54. ♍ anno 1693. cum ☉ anno quolibet eclipticam totam percurrat.

Per ephemerides anni 1693. quæro ſub columna ☉ gr. 5. 54. ♍, & agnoſco intercipi inter dies 28, & 29. Auguſti dicti Anni, nam ibi eſt locus ☉ die 28. in gr. 5. 40'. 22' ♍, & die 29. in gr. 6. 38. 30. ♍. quorum differentia eſt m. 58. 8. motus diurni ☉, & ſubtrahendo gr. 5. 40. 22. à datis gr. 5. 54. ♍ fit pars motus diurni m. 13. 38, cum quibus vt m. 58. 8. ad h. 24. ita m. 13. 38. ad h. 5. m. 37: ſec. 34. temporis regreſſus ☉ ad datum eius punctum: hæcque proportio habetur multiplicando m. 13. 38. aut ſec. 818. per h. 24; & productum 19632. diuidendo per m. 58. 8; aut ſec. 3488. quarè ☉ regreditur ad gr. 5. 54' ♍ h. 5. m. 37.

ſec. 34. P.M. diei 28. Auguſti Anno 1693; quod ſic probari poterit Locus ☉ die 28. Auguſti 1693. ♍ gr. 5. 40. 22".

Pars proportionalis pro h. 5.	12. 7.
Pars proportionalis pro m. 37.	1. 12. 40.
Pars proportionalis pro ſec. 34.	18. 20.

Summa, & idem Loci aſſumpti ☉ ♍ gr. 5. 54. 0. 0.

Momento temporis h. 5. 37. 34. tit ulis tabulæ cõtrarijs æquato P. M. diei 28. Auguſti 1693. erigatur figura cæleſtis, & ipſa vocabitur Reuolutionis ☉, quæ maximè ſola vſui eſt, & magis certa.

Conſtructa reuolutione ſolet inueniri diuiſor, qui eſt ille dominus termini, qui ab aſcendente percurritur, & pro hoc inueniẽdo, aſcenſioni obliquæ aſcendentis adduntur anni elapſi, & illius gradus qui naſcitur dominus termini iuxtà punctum 18. erit diuiſor, vt ex. gra. in exemplari figura cœleſti appoſita, fuit aſcenſio obliqua aſcendentis gr. 257. 42. ſi quæratur diuiſor anno 1693. completo ſubducetur annus 1688. à 1693. & remanebunt anni 5. completi, quibus additis gr. 257. 42. fit obliqua gr. 262. 42, cuius locus eclipticæ competens eſt gr. 2. 52. ♐. quare ille Planeta qui ſuum terminum habebit in gr. 2. 52. ♐ ipſe erit diuiſor, vt hic eſt ♃, qui ſuum habet terminum, vſque ad gr. 12. compl. ♐. vt in de Zodiaco, & Ecliptica: vtendo tabulis addentur tot 4. minuta, quot anni elapſi aſcenſioni rectæ M.C. & productum ſub columna horoſcopi dictabit eclipticæ partem competentem, cum qua, & vt ſupra. Fuit aſcenſio recta MC. h. 11. 10. 49'. cui addendo min. 20; quia ſupponuntur elapſi quinque anni fient h. 11. 30'49" cum quibus vt ſupra ſub horoſcopi columna habentur gr. 252' ♐.

Pars fortunæ reuolutionis habetur addendo diſtantiæ inuentæ luminarium in radice, aut reuolutionum fundamento aſcendentem reuolutionis.

Quoniàm ad rectè conſtruendas Stellarum Reuolutiones, ſiue ad perſcrutanda temporum momenta, quibus regrediuntur ad idem fermè Radicis centrum, eiſdem vti his hypotheſibus omninò oportet.

Non incaſſum addere cenſeo facilimam methodum quà per noſtras impreſſas Ephemerides, (eritque ſecundum noſtras hypotheſes) ad alios Annos præter eos in ipſis Ephemeridibus contentos, momentis quibuslibet, locus Solis, cuius regreſsus vt tutiores ſequuntur Aſtrophyli, valeat reperiri.

Atque vt huiuſmodi habito loco Solis radicali, vnuſquiſque in ipſius Reuolutionibus fœlicitèr elaboret. Aliàs,

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Aliàs, ſecundùm hypotheſes diuerſas, non differentiæ, quià errores maximi promanarent.

Ad indagandum igitur, vt diximus, locum Solis, ac ad hanc noſcendam regulā priùs animaduertere neceſſe eſt virtute diei qui quadrennio quolibet elapſo Annis ipſis additur, & appellantur biſextiles, quod percurrebat Anno quadriennij primo, & ſic de quadriennio in quadriennium, atque Annis reſpectiuè videlicet de primo primi quadrienij; ac primo ſecundi &c. ſecundo primi, & ſecundo ſecundi &c.; At quià non ad exactum integraliter locum primum, perficit enim Sol curſum ſuum in Ecliptica diebus quidem 365. & ſex horis, quæ tamèn non ſunt integræ, ideò, & Sol, huius cauſa deficientiæ, nec non progreſſus ſolis in Apogęum ſuum, alijſque aſtronomicis de cauſis, quas hic longum eſſet recenſere, primam ſedem adæquatè non attingit.

Cognita ergò hac motus differentiuncula erit verè notus locus Solis auxilio noſtrarum Ephemeridum ad alia quælibet tempora. His poſitis vt exploretur hæc differentiuncula ſic legitimum erit ratiocinium.

Locus Solis ex. gra. prima die Anni 1685. parum erit diminutus à loco Solis, eadem die, Anni 1689, & huius ab ea Anni 1693. factaquè ſubtractione loci Solis, qui per noſtras Ephemerides prima die Anni 1685. reperitur in gr. 11. 52'. 3''. & ab altero loco Solis ipſa die prima Anni 1689. qui pariter ex noſtris Ephemeridibus eſt in gr. 11. 53'. 51''. &c. habebitur quæſita differentiuncula min. 1. ſec. 48. quæ ſi addetur dicto loco Solis prima die Anni 1689. fiet locus Solis pro prima die Anni 1693. gr. 11. 55. 39''. &c. ac ſi demetur à loco Solis Anni, & prima die 1685. fiet pariter locus Solis pro prima Anni 1681. gr. 11. 50''. 15''. &c., & ſic pro Annis antè, & poſt, addendo ſemper differentiunculam ad Annorum augmentum, ac minuendo ad decrementum. Atquè vbi plures intercepti erunt Biſsextiles toties multiplicabitur ea differentiuncula quot erunt Biſsextiles, & aggregatum addetur loco Solis in Ephemeridibus collocato, ſi Annus, quo locus Solis quæritur erit maior Anno Ephemeridis, quæ vult adhiberi, ſubtrahatur ſi minor eritque verus locus Solis ad ea tempora, ante, & poſt.

Adnotando etiam eligi debere ſemper Annum Ephemeridis interquem ac Annum propoſitum, quadriennium, vel quadriennia ex integro intercipiantur: vt ſi vellemus indagare locum Solis Anno 1690. electio facienda eſt, de 1694. 1698. &c.; ſiuè de antecedentibus 1686. 1682. &c. non de 1691. 1692. &c. aut de 1689, vel 1688. &c. eritque ſemper obſeruatis præmiſſis, & non habita conſideratione differentiæ ali-

alicuius ſecundæ, quæ, & de rarò continget verus locus Solis ad inſtans optatum.

Hæcque firmentur vlteriori paradigmate, Anno videlicet 1643. hor. 19.46'. 4''. P. M. diei 18. Auguſti.

Si noſtræ adeſſent Ephemerides Annorum 1647. 1651. 1655. &c. aut, hoc ipſo ordine, antecedentes 1639. 1635. &c. vtique adhiberi poſſent. At & quoniam placet vti noſtris vltimis Ephemeridibus, percurrere neceſſe erit Annum 1687. continentem perfecta quadriennia ab Anno 1643.

Atque inter Annos 1643. & 1687. numerantur Anni 44. ſiuè vndecim quadriennia, aut Biſſextiles.

Locus Solis ex noſtris Ephemeridibus Anno 1687. die 18. Auguſti.

	gr.	25.	28'.	58''. &c.
Sed, & Anno 1691. eadem die	gr.	25.	30.	54. &c.
Igitur differentiuncula	gr.	0.	1.	56.
Locus Solis Anno 1687. die 19. Auguſti	gr.	26.	26.	48. &c.
Sed, & Anno 1691. ipſa die 19.	gr.	26.	28.	44. &c.
& differentiuncula	gr.	0.	1.	56.

Hæc multiplicetur per 11. quadriennia, ſiuè Biſſextilia, vt ſuprà, & fient min. 21. ſec. 16, quibus ſubtractis à locis Solis dierum 18., & 19. Auguſti Anni 1687. fuit locus Solis Anno 1643., & ſecundùm noſtras hypotheſes, meridie die 18. Auguſti in gr. 25. 7'. 42''. &c. ac die 19. in gr. 26. 5. 32. &c. hinc motus diurnus Solis min. 57. 50''; cuius proportio pro hor. 19. 46'. 4''. eſt min. 47. ſec. 38. atquè verus locus Solis ad momentum prędictum gr. 25. 55'. 20'' .&c. ſemper adhibendus dum velint Solarium præſtari Reuolutionum opera cum noſtris Ephemeridibus.

Quarè ad conſtruendam Solis Reuolutionem pro Anno 45.

Locus Solis die 18. Auguſti 1687. ex noſtris	gr.	25.	28'.	58''. &c.
Ephemeridibus die 19.	gr.	26.	26.	48.
Motio diurna	gr.	0.	57.	50.
Locus Solis radicalis, vt ſupra inuentus in	gr.	25.	55.	20.
Differentia inter hunc, & locum vt ſup. die 18.	gr.	0.	26.	22.

Si

Si igitur diurnæ Solis motioni gr. o. 57'. 50''. competunt horæ 24. eiuſdem portioni gr. o. 26'. 22''. debentur hor. 10. 55'. 27''. P. M. dici 18. Auguſti æquandum tamèn prout de morè tabellæ titulis in contrarium adhibitis, vt reducatur in verum.

Quæ ad annuos diſcurſus pro Medicis, Nautis, & Agricolis operari.

PVNCTVM LXXXVIII.

ANno, quo diſcurſus Aſtrologicus vult concludi per prob. antecedens debebit quæri tempus quo ☉ ingreditur primam partem ♈ ♋ ♎ ♑ & ſupra ipſum erigi figura cœleſtis, per quam haberi poteſt iudicium;

Secundo pariter erigentur cœleſtes figuræ tempore, quo vel ☉ iungitur ☽, vel cum hac habet quadraturas.

Tertiò ſi accidat maxima coniunctio, tempus, quo ipſa euenit, ſi verum elici poteſt.

Quarto ſi accidant eclipſes erectio figuræ cœleſtis ad harum tempus poſſibile.

Atque indagari debet, quisnam Planetarum ſuper has figuras maiorem habebit poteſtatem, per punctum 18. vt dominus anni conſtituatur: hæc omnia tamen ſecundum dogmata Antiquorum.

Particulare haberi poteſt per figuras, & dominus ☌ □ ☉ & ☽ & aſpectibus particularibus tam lunæ cum Planetis, quam Planetarum inter ſe, amplius, & Ortu, vel Occaſu Planetarum, cum natura ſtellarũ fixarum, & hic notandum, quod triplices accidere poſſunt cuniunctiones, ſcilicet maxima: media, & minima, maxima quæ eſt ♄, & ♃, media quæ eſt ♄, & ♂, & minima quæ eſt ♃ & ♂, & nam ♄ ♃, & ♂ dicũtur Planetæ ſuperiores, quia proprios orbes ſupra ſolis orbem acquiſiuerunt.

Aſtronomica, quæ ſpectant ad Criſim exponere.

PVNCTVM LXXXIX.

IN criſi, quæ iudicium eſt, natura fit actor, reus virtus ægrotantis, ægritudo, & humores cauſa, Iudexque influxus ſuperiorum corporum, ex quibus publicatur iudicium, eſt enim criſis humani corpo-

ris

ris ægrotantis ex templo facta alteratio ad ſanitatem, aut mortem terminanda.

Criſis aut ſimplex eſt, aut compoſita; ſimplex quæ celeriter ad ſalutem, vel celeriter ad mortem reducitur, vel paulatim ad ſalutem, ſeu paulatim ad mortem. Compoſita eſt, quando morbus diſsoluitur diminutè, ſed poſtea completur, cum diſsolutione ad bonum, vel malum; Hæcque criſis ſubdiuiditur: vna in qua fit magna alteratio ad ſalutē in primis deinde paulatim completur donec æger ſanetur, ſecunda in qua fit alteratio magna in primis ad mortem, deindè paulatim completur donec moritur atque in laudabili criſi oportet coctionem præcedere, & poſtea diuidere, & deinde expellere; & ideò criſis nunquam initio fit, nec in augmento vniuerſalis morbi, neque fit quoque in declinatione vniuerſali morbi ſalubris, dum enim commotio per materiam eſt, accidentia intenduntur, & quando intenſa ſunt accidentia, non eſt declinatio, ideo in declinatione ſunt remiſſa accidentia.

Nihilominus criſis ſumpta pro euacuatione in ſalubri morbo poteſt incipere ſtatu poſt materiæ commotionem, & ſeparationem noxij, & eius directionem ad loca expulſionis, & hoc erit in fine ipſius ſtatus, vt Galenus in tertio criſium. Melior criſis eſt in hora ſtatus ægritudinis

Criſis eſt ex cauſis duplicibus generalibus, ac particularibus; generales ſunt pugna, quæ fit inter naturam, & morbum; vnde mouetur natura ad morbum oppugnandum, et eius cauſas, et ex aduerſo morbus naturam; fitque iſte motus à natura tamquam à principali agente adiuta influentia cœleſti, non autem à morbo: aliquando tamen efficit natura criſim non adiuta cœleſti influentia, aſt ſolum ſtimulata.

Cauſæ autem particulares criſis euacuationis ſunt virtus fortis ſuper materiam dominans ei ſecundum totum, vel ſecundum eius plurimam partem, & materia morbi virtutis irritatiua, & aſpectus corporum cœleſtium. Criſis autem deriuationis cauſæ ſunt virtus fortis, non quidem ſimpliciter, quia virtus ſimpliciter fortis, qualis eſt in criſi euacuationis non ſeruat materiam intra corpus, ſed extra corpus expellit atque euacuat, ſed dicitur fortis in comparatione ad virtutem, quæ in pugna ex toto ſuccumbit, impotens euacuare materiam, aut eam permutare, quę ſimpliciter debilis nuncupatur, ità quod poteſt dici media inter virtutem ſimpliciter fortem, & ſimpliciter debilem, & materia mala: non tamen multum ſtimulatiua virtutis, obediens tamen ei, vt ab ea ad extra corpus expellatur, & cum his aſpectus corporum cœleſtiū. Attamen hæ criſium ſpecies debilitantur ſecundum fortitudinem, & debilitatem

virtutis, & cœleſtis aſpectus, & ſecundum obedientiam naturæ, & eius rebellionem ad materiæ multitudinem, aut paucitatem.

A nomine criſis deducuntur dies critici, aut critimi, hoc eſt iudiciarij, & decretorij, & hi diuiduntur in intercidentes, indicatiuos, & radicales: & dies intercidentes ſunt, in quibus contingit fieri criſim ſolum per irritationem naturæ contra materiam morbi, quæ irritata inſurgit ad expellendum eum, hique dies tantum in morbis acutis peracutis, & perperacutis attendi ſolent; eſt enim ſolum iſtorum materia talis, quæ poteſt ſtimulare naturam ſic, vt moueatur ad expulſionem eius non expectata natura ſuperiorum, quia talis materia eſt cholerica, cuius eſt mouere de tertio in tertium, & ſic de tertio jn tertium ſtimulare naturam, & ideò hi dies per ternarium, cum replicatione tertię diei computantur, vt 1. 2. 3. 3. 4. 5. & 5. 6. 7. vſq; ad 14. Dies indicatiui ſunt ij in quibus iudicia, & rudimenta Medicis traduntur à natura alterationis, & mutationis materiæ, & indicant quidquid natura die critico radicali mali, aut fauſti videtur patratura, & ſunt dies 4. 11. 17. 24. nam quarto die ſumitur iudicium commotionis â natura exhibendæ in ſeptima, ſic quæ præbeat decimus quartus auſpicari congruum eſt ab vndecimo, in 17. aut in 18. quæ contingenda in 20. aut 21; in 24. vel 25. quæ in 27. aut 28.

Dies critici radicales ſunt quatuor in menſe mempè 7. 14. 20. 27. nam cuilibet vigenario numero dantur tres ſeptimanæ, & primus ſeptimus numerus, aut prima ſeptimanæ non replicatur, cum prima die ſecundæ ſeptimanæ, ſed ſeorſim numerantur, ſed ſecundus ſeptimus dies qui eſt finis ſecundæ ſeptimanæ replicatur in tertia ſeptimana, & fit principium eius, & computantur ſic ſeptimanæ 1. 2. 3. 4. 5. 6. 7. & poſtea 8. 9. 10. 11. 12. 13. 14. poſtea replicando 14. 15. 16. 17. 18. 19. 20.

Horum habita cognitione erigetur thema cœleſte ad id punctum, quod potuit eſſe alicui initium ægritudinis, et conſiderabitur locus ☽ cui ſemper addendo gr. 45. erunt vt infra noti dies critici, et indicatiui.

Supponatur ad exemplum allatum eſſe tempus aliquod ægritudinis, et in hoc conſiderabitur locus ☽ in gr. 4. 56. ♌ cum quo, vt hic vbi loco ☽ additi ſunt ſemper gr. 45. et locus productus quæſitus eſt in Ephemeridibus, addibita parte proportionali, hoc medio, nam ſi motus diurnus dat horas 24. quid ex ipſis pars ipſius motus diurni, quæ eſt differentia inter locum Ephemeridum proxime minorem, et productum locum ☽.

	Lunæ motus			D.	H. M.
Decubitus	G.	♎	M.	28.	0. 40.
Primus Indicatiuus	4.		56.	PM.	Auguſti
Dies	19.	♏	56.	anno	1688.
				31.	19 48.PM.
				Septembris.	
Primus Criticus.	4.	♑	56.	4.	10. 50.
Primus Indicatiuus.	19.	♒	56.	7.	17. 28.
Secundus Criticus.	4.	♈	56.	10.	17. 52.
Tertius Indicatiuus.	19.	♉	56.	13.	18. 42.
Tertius Criticus.	4.	♋	56.	17.	0. 50.
Quartus Indicatiuus.	19	♌	56.	20.	13. 58.
Quartus Criticus.	4.	♎	56.	24.	7. 14.

De Profectionibus

PVNCTVM C.

Profectio eſt æqualis inceſſus ſignificatoris ſecundum ſignorum Zodiaci conſequentiam.

Tripliciterque imaginantur Aſtrologi proficiſci ſignificatores, nempè per Annos, Menſes, & dies.

In annua profectione intelligunt ſignificatorem percurrere integrũ Eclipticæ ſignum, vt ſi profectio primi Anni ſit ☉ exempli gratia percurrente gr. *6.* ♍, ſecundi Anni erit in gr. *6.* ♎, tertij in gr. *6.* ♏, & ſic deinceps quouſque decimo tertio Anno, iterum deuoluatur ad grad. *6.* ♎, qui ordo erit perpetuus, vt ex ſchemate ſequenti cognoſcetur.

Exemplum Annuarum Profectionum in antecedenti primà cœleſti figura.

Hac

☉	☽	☊	MC	Aſc	♄	♃	♂	♀	☿	Anni Labentes						
G.	G.	G.	G.	G.	G.	G.	G.	G.	G.							
5 54	4 56	28 2	16 38	29 0	21 53	18 20	7 45	4 16	1 23	Die 28. Auguſti 1688. h. 0. 40. P. M.						
♏	♎	♐	♍	♏	♎	♑	♍	♍	♍	1 1688	13 1700	25 1712	37 1724	49 1736	61 1748	73 1760
♎	♏	♑	♎	♐	♏	♒	♎	♎	♎	2 1689	14 1701	26 1713	38 1725	50 1737	62 1749	74 1761
♏	♐	♒	♏	♑	♐	♓	♏	♏	♏	3 1690	15 1702	27 1714	39 1726	51 1738	63 1750	75 1762
♐	♑	♓	♐	♒	♑	♈	♐	♐	♐	4 1691	16 1703	28 1715	40 1727	52 1739	64 1751	76 1763
♑	♒	♈	♑	♓	♒	♉	♑	♑	♑	5 1692	17 1704	29 1716	41 1728	53 1740	65 1752	77 1764
♒	♓	♉	♒	♈	♓	♊	♒	♒	♒	6 1693	18 1705	30 1717	42 1729	54 1741	66 1753	78 1765
♓	♈	♊	♓	♉	♈	♋	♓	♓	♓	7 1694	19 1706	31 1718	43 1730	55 1742	67 1754	79 1766
♈	♉	♋	♈	♊	♉	♌	♈	♈	♈	8 1695	20 1707	32 1719	44 1731	56 1743	68 1755	80 1767
♉	♊	♌	♉	♋	♊	♍	♉	♉	♉	9 1696	21 1708	33 1720	45 1732	57 1744	69 1756	81 1768
♊	♋	♍	♊	♌	♋	♎	♊	♊	♊	10 1697	22 1709	34 1721	46 1733	58 1745	70 1757	82 1769
♋	♌	♎	♋	♍	♌	♏	♋	♋	♋	11 1698	23 1710	35 1722	47 1734	59 1746	71 1758	83 1770
♌	♍	♏	♌	♎	♍	♐	♌	♌	♌	12 1699	24 1711	36 1723	48 1735	60 1747	72 1759	84 1771

Hac in Annua progreſſione cum toti Anno Solari competat ſignum integrum, competent ſingulis gradibus dies duodecim, & ſignificator progreditur ſingulis menſibus motu annuo profectionali, duobus gradibus cum dimidio, quod eſt clarum, & materia non indiget maiori extenſione.

In menſtrua profectione vnicuique menſi dant Aſtrologi vnicum ſignum

gnum, itaut ſignum profectionis annuæ ſit ſignum primi menſis eiuſdem Anni; quare Annus ex ☉. in tres ſupra decem partes æquales remanent diuiſus, & cuique diei competunt gr. 1. 4ʹ 4ʹ.

In diurna tandem progreſſione tribuunt ſignum vnum pro duobus diebus h. 3. min. 52. & ſi ſingulis diebus gr. 13. 53. & proportionabiliter cum aurea regula.

Tranſitus Stellarum excerpere.

PVNCTVM CI.

TRanſitus eſt recurſus Stellæ ſupra alium Locum Stellæ, & ab Aſtrophilis conſideratur pro præciſiori influxuum ſcientia, correſpondentia, & tempore, maxime cum fiunt tranſitus ſuperiorum Planetarum ſuper loca hylegialia, & hi quidem Tranſitus percurrendo Ephemerides poſſunt excerpi, vt in exemplari prima figura ♄ tranſibit ſuper horoſcopum eiuſdem conſtitutum in gr. 29. ♏ die 2. Februarij Anno 1691. quo tempore ♄ etiam percurret gr. 29. ♏. ità ♃ anno 1695. inter dies 27. & 28. Auguſti tranſibit ſuper locum ☉ eiuſdem cæleſtis figuræ, quoniam eo tempore gr. 5. 54. ♍ loci ☉ illuſtrabit; poteſtque tempus præciſius hoc eſt hora, & minutum haberi per punctum 6. vel 19., & cum magis erunt tranſitus vniformes, nempe quò magis in partibus Eclipticæ concordabunt, & Latitudinibus, eò fortiores iudicantur.

De triplici Correctione cæleſtium Thematum, per Annimodar, Trutinam Hermetis vnde tempus Conceptionis, & per Accidentia in gratiam Medicinæ.

PVNCTVM CII.

CErtum eſt qualibet minima temporis minutia variari cæleſtia, & oportere verum tempus figuræ cæleſtis habere, vt ex eo innoteſcere poſſit vera Cælorum habitudo, per quam & deindè veri influxus generaliter cognoſci valeant, vt & verum directionis tempus, ex quo & natura, quæ ſit directionis, elici poſſit, ex. gra. qualitas morbi ſignificata & ægritudinis accidentia, ſed cum vt plurimum ignota ſint hæc tempora ſpeculati ſunt vſque adhuc Aſtrologi tres modos, ex quibus ipſa haberi poſſint. Pri-

Primus appellatur correctio cæleſtis figuræ per Annimodar, eſtque Ptolomæi, auxilio præcedentis ☌ aut ☍, & per hoc etiam notandum quæ præceſſerit ☍ aut ☌ Luminarium geneſim corrigendam, nam in eo gradu, quo erit Dominus eiuſdem præcedentis ☌, aut ☍ ex puncto 81, & in illo gradu debebit collocari Horoſcopus, aut medium Cæli, prout gradus Horoſcopi, vel medij Cæli fuerint numero propinquiores gradibus Planetæ, qui fuit inuentus Dominus præcedentis ☌, aut ☍.

Si veró duo, vel plures fuerint reperti Planetæ dignitatibus, ac prærogatiuis æqui potentes, eo caſu gradus Horoſcopi ſtaduendus erit æqualis numero illius Planetæ, qui minus ab ipſo diſtabit.

At ſi Planetæ dominatores inuenti etiam fuerint pares non tantum quo ad dignitates, ſed etiam quo ad propinquitatem numeri graduum, & fractionum, perpendatur vtro in cardine Horoſcopi vel Medij cœli fuerit Planeta dominator & iuxtà illius numerum cardo corrigatur; vbi nota ne hallucineris, quod ità diſtant à gr. 15. gr. 13; ſicuti ab eiſdem gr. 15. diſtant per 2. gr. 17; ac ſi nemo Planetarum dominatorum vt ſupra reperiatur in aliquo cardine ſiue angulo, corrigatur per Planetam qui fuerit in domo præſtantiori ſecundum ordinem domuum cæleſtium, de quo ſcripſimus puncto 34; cuius doctrina difficultatibus omnibus, quæ oriri poſſent, ſatsfaciet.

Secundus modus cęleſtes figuras corrigendi dicitur per Trutinã Hęrmetis Triſmegiſti, pendetque ab axiomate quod locus ☽ in natiuitate eſt aſcendens in conceptione, & locus ☽ in conceptione eſt aſcendens natiuitatis, vel locus oppoſitus: In Praxi: conſtructa figura cæleſti æſtimatiua videnda eſt diſtantia ☽ ab angulo Orientis, ſi ☽ fuerit ſub terra, & ab angulo Occidentis ſi ☽ fuerit ſupra terram, & cum hac diſtantia ſumendum eſt per tabellam ſequentem tempus moræ in vtero ſubducendum à tempore natiuitatis, vt fiat tempus conceptionis in meridie. Luna deinceps ad meridiem diei conceptionis conſideretur, quæ ſi ab angulo Orientali in figura natiuitatis non diſtiterit plus gradibus. 13; ea erit vera dies conceptionis, at ſi plus gradibus. 13. pro die vera conceptionis ſumenda erit dies antecedens, aut ſubſequens, prout ☽ fuerit propinquior Aſcendenti natiuitatis, ex eo quod plurima ſint, quæ partum accelerare, ac retardare poſſunt.

Pro momẽto pręciſo conceptionis inueniendo: conſtructa figura cæleſti in meridie diei conceptionis, ſumenda eſt Aſcenſio recta ☼ numerata à principio ♑ non ♈, fitque peradditionem gr. 90. Aſcenſioni rectæ numeratæ ab ♈, quæ ſubtrahenda eſt ab aſcenſione obliqua ☽ ſumpta

in

in altitudine poli loci, differentiaque commutata, more ſolito, in horas & minuta exhibebit verum tempus aſtronomicum à die conceptionis, ad quod tempus conſtucta figura cæleſtis erit quæſita conceptionis, cuius locus ☽ debebit eſſe Aſcendens natiuitatis.

Tabula moræ partus in vtero materno.

Tabula Sign. Grad.	☽ Sub Terra Diſt. ☽ ab Oriente Dies	☽ Supra Terram Diſt. ☽ ab Occidente. Dies
0. 0	273	258
0. 12	274	259
0. 24	275	260
1. 6	276	261
1. 18	277	262
2. 0	278	263
2. 12	279	264
2. 24	280	265
3. 6	281	266
3. 18	282	267
4. 0	283	268
4. 12.	284	269
4. 24	285	270
5. 6	286	271
5. 18	287	272
6. 0	288	273

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Tabula Menſium Menſes Com.		In Anno Com. Dies		In Anno Biſeſt. Biſex. Dies.	
31	Ianuarius	31	31	31	31
28	Februarius	28	59	29	60
31	Martius	31	90	31	91
30	Aprilis	30	120	30	121
31	Maius	31	151	31	152
30	Iunius	30	181	30	182
31	Iulius	31	212	31	213
31	Auguſtus	31	243	31	244
30	September	30	273	30	274
31	October	31	304	31	305
30	Nouemb.	30	334	30	335
31	Decemb.	31	365	31	366

Tertius modus figuras cœleſtes corrigendi communis eſt, & certior vndequàque, quia fit per accidentia præterita nato, vt puta alicuius ægritudinis &c. nam ſi vera, ſunt aſtrologica quo ad modum, & influxum, certum eſt quod omnia patere debent aſtrologicè, & cum tempus aliquantiſper ſupponatur ignotum, vt plurimum videtur poſſe id, quod verum eſt, haberi per accidentia, itaut præciſè per directionem, vt poſſibile eſt pateat euentus, ex cœleſtium Poſitionum vera collocatione: licet enim dicere, quod ſi aliqua ægritudo oſtendatur à directionibus poſſibilis Anno 15, & ipſa ſuccedat Anno 18. quod Geneſis ad verum tempus non fuerit erecta, quia debuiſſet accidens Anno 18. demonſtrare, quare, & verum tempus figuræ per accidens hoc Anni 18. haberi poterit, ſicuti & per ſimilia aliorum temporum accidentia per ſequentes adnotationes, & operationes.

Colligentur per æſtimatiuam cæleſtem figuram Aſcenſiones ſignificatorum principalium, & illis addetur tempus, quo notum eſt eue-

niſſe

niſſe datum accidens, vel accidentia, & productæ Aſcenſionis, vel Aſcenſionum quæretur competens arcus Zodiaci per punctum 34 ac ſi inuenientur cum arcu, & auxilio ſpeculi aſtrologici configurationes accidenti, vel accidentibus proportionatæ, ſicuti etiam, & cum tempore accidentium congruentes momentum illud, ad quod fuit erecta figura cœleſtis erit verum eiuſdem.

Sed ſi aliqua adſit diſcrepantia temporis, ſitque accidenti proportionatus aſpectus (vbi intelliges de pluribus, quod de vno dicimus) proueniens ſolum à medio cœli, aut Aſcendente, pro habenda vera Cœli correcta figura, ſubtrahetur tempus accidentis reductum, prout explicuimus in expoſitione Directionum, ab Aſcenſione Promiſſoris, & fiet Aſcenſio reſpectiuè vel obliqua Aſcendentis, vel recta medij cœli, & cum qualibet harum erigi poterit figura cœleſtis per antecedentia Puncta, ſcilicet ex recta medij cœli, & ex obliqua Aſcendentis, nam ab hac demendo gr. 90. ſemper fiet recta, vt ſupra medij cœli, qua cognita etiam per antecedentia noſci poterit verum tempus figuræ, ad quod ſi neceſſe erit rurſus debebunt ſupputari loca Planetarum, vt in puncto 19.

At ſi accidens non ex medio cęli, aut Horoſcopo haberetur, & bene ab alijs ſignificatoribus, eſſetque correſpondentia in quantum ad effectum, non in quantum ad tempus, deberet intra terminos diſcretos inueniri talis circulus Poſitionis ſignificatoris, vt fieret tali tempore correſpondentia, quod operanti facile conſtabit per antecedentes doctrinas de circulis Poſitionis, eoque circulo Poſitionis inuento conſiderandum erit, quod ſignificator permutando circulum Poſitionis mutat, & propriam à meridiano diſtantiam, quamobrem debebit indagari quæ diſtantia competat, quâ inuenta poterit cognoſci pars Æquatoris meridianum percurrens, cum qua verum ex antedictis tempus veraque cęleſtis figura fabricari poterit.

Vaſtiſſima materia videtur clara, ideò exemplis non indiget: notabis tamen, quod pro correctionibus præſentibus debebunt quoque conſiderari Tranſitus, Reuolutiones, Directiones etiam ad Antiſcia, & contrantiſcia, ſtellas fixas ſupra memoratas &c.

Per

Per antecedentia Problemata Horologia Solis Horizontalia Italica ad quamcumque poli eleuationem facilimè conſtruere.

PVNCTVM CIII.

VT etiam in hac parte ſatisfaciamus promiſſis, ac vt elucefcat quot, & quantæ operationes exigi poſſint ab antecedentibus eiſdem problematis, paruiſque Tabularum numeris, libentius quoque per antecedētia problemata methodum Horologia Solis Horizontalia, ac Verticalia, ad quamcumque locorum latitudinem ſuperaddimus.

Pro Horologio intelligitur Inſtrumentum quoddam per odinationem aliquam præbens horas, diuiſiones ſcilicet ciuilis temporis æquales: vnde pro Horologio Solis horizontali intelligenda quoque erit operatio quædam facta in plano aliquo Horizonti vero parallelo, per quam, mediantibuſque Solis vmbris poſſunt oculariter cognoſci horæ labentes dierum.

Et cui placuerit hæc fabricare horologia horizontalia, per problemata præmiſſa

Primo perquirat in plano horizontali Meridianam lineam, prout docuimus in puncto 16. ac bene animaduertat omnia in eodem puncto expreſſa.

Secundò conſideret per arcus ſemidiurnos, & ſeminocturnos de quibus ratiocinati fuimus in puncto 31. qnales ſint horæ diei, ac noctis, extante ☉ tam in initio ♋, quam ♑, duplicato enim arcu ſemidiurno, aut ſeminocturno fit arcus diurnus, qui ſemper ſubtractus ab hor. 24. dictabit ortum ☉, quo cognito facile horas diei, & noctis diſtinguet, vel conſulet tabulam dierum maximarum de qua in puncto 45. nam per eam in directum Altitudinis poli habebit etiam Ortum ☉, abſque alia operatione.

Tertiò cognitis horis diurnis, extante ☉ in principio ♋, & principio ♑ ad quamlibet earum ſupputet altitudines ☉ ſupra Horizontem per punctum 40.

Quartò eligat ſtylum, aut Gnomonem eius magnitudinis, quæ placuerit magis, extendatque prout in figura exemplari ſequenti.

Quintò per altitudines ☉, & proportione gnomonis electi ſupputet ad quaslibet horas ſupradictas vmbras ☉, momentis horarum earumdem per punctum 48.

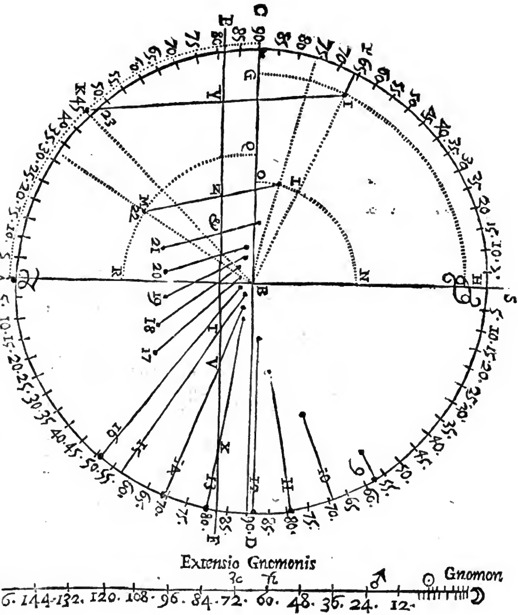
Sexto inueniat angulos, quos facit circulus verticalis ☉ cum Meri-

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diano momentis earumdem horarum pet punctum 42. Iuxta quæ conſtruximus ſequentem Tabulam pro Horologijs ☉ Horizontalibus ad eleuationem poli gr. 44. min. 29. extante ☉ in principijs vtriuſque Tropici.

☉ in ♋							☉ in ♑						
Diei	Vmbræ Latitudo			Anguli Verticalis Horarũ, & Merid.			Diei	Vmbræ Latitudo			Anguli Verticalis Horarũ, & Merid.		
Horę	P	Occi.	M	G		M	Horæ	P	Occi.	M	G		M
23	72	S	58	66	S	10	23	82	A	45	45	A	91
22	34.		12	75		48	22	45		7	32		46
21	20	A	49	85	A	32	21	34		44	19		13
20	14		1	83		48	20	30		27	4		40
19	9		66	70		50	19	31	Me-	12	9	Merd.	52
18	6		76	52		50	18	36	rid.	45	24		19
17	5	Me.	2	25	Me-	8	17	55		45	37		23
16	4	rid.	42	12	rid.	3	16	149		47	49		11
15	5		58	44		3	15		Ortus		59		50
14	8		47	65		1	14				69		40
13	12	S	7	79	S	25	13				79		20
12	17		43	89		10	12				89		10
11	27		40	79		20							
10	52		39	69		40							
9	205		0	59		50							

Septimò ad lineam meridianam in figura ſequenti ſuppoſitã eſſe ABS; vbi magis aptum eſſe cognoſcet ratione aſſumpti Plani Horizontalis, ducet lineam perpendicularem, vt C. D. animaduertendo in interſecationehuius cum linea ABS. meridiana, ſicq; puncto B. collocandum eſſe, magnitudinis aſſumptæ gnomonem, cuius vertex centrum Mundi, lineaque



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que CD verticale primarium, terminumque Septemtrionalis, ac auſtralis partis conſtituere debebit.

Octauo facto centro in B, puncto, vbi figi debet ſtylus Horologij, vt diximus, niſi velit vti Quadrante ſeparato, ducat circulum, ſumpto ſemidiametro ad placitum, & quia huiuſmodi procedendo habebit totum circulum ductum ACSD diuiſum in quatuor quadrantes æquales, omnes diuidat in gr 90. ex quibus ſinguli quadrantes conſtant, vt apparet in appoſito dyagrammate.

Nonò diſtinguat orientalem, nec non partem occidentalem, ſeptemtrionalem, ac auſtralem, conſiderando quod ☉ oriens tranſmittit horas ſuas Occaſum verſus, atque Occidens ad partem orientalem, & propter hæc ſuppoſuimus ortum ☉ in C. atquè Occaſum in D, ſic CSD partem Septemtrionalem, Auſtralem vero CAD.

Decimo per ſumptam vnicam magnitudinem gnomonis in figura ☉ ☽ ducat ad verticalem lineam CD, parallelam EF, quæ lineam æquinoctialem repræſentabit.

Vndecimo incipiendo ob maiorem facilitatem deſcribere lineam h. 23. animaduertat quod ad deſcriptionem h. 23.; ac cæterarum, neceſſaria ſunt inuenta duorum punctorum principalium, ad quorum lineam ordinatæ ſint omnes vmbræ pro h. 23. quod & in alijs horis intelligas, verſante Sole in quolibet ſigno Zodiaci: Sumat igitur pro adnotandis ſupradictis duobus punctis primo latitudinem vmbræ pro h. 23. extante ☉ in ♋ quam, cum velit conſtruere horologium Sol horizontale in altitudine poli gr. 44. 29', ſupputatam in antecedenti Tabula pro eadem poli eleuatione, habet p. 72. m. 58. S. videlicet ſeptemtrionalem, & cum eiſdem p. 72.; aut 73. propter m. 58. quæ excedunt dimidium Centeſimi, accipiat circini latitudinem in extenſione gnomonis à parte figuræ delineata, vt ☽ ♄; retentaque hac circini latitudine p. 73. qualium gnomon ſuppoſitus fuit continere 12. facto centro (quod etiam in ducendis aliarum horarum lineis obſeruare debebit) in B, vbi linea meridiana SBA, ac verticalis CBD interſecant, ducat ſeptemtrionalem partem verſus S quadrantem circuli GIH. deindè, cognito per eamdem præcedentem Tabulam h. 23. verticalem circulum facere angulum cum meridiano gr. *66. 10.*; ſumat auxilio diuiſi iam Quadrantis CS in Quadrante GIH gr. *66.* per lineam ab eodem centro B. ad P. gr. *66*; & habebit in I. punctum primum quæſitum h. 23. commorante Sole in ♋.

Pro noſcendo alio puncto terminali lineæ h. 23. per quæ poſſit eſſe cognita quoque tota linea h. 23.; conſideret pro eadem h. 23. vmbræ lati-

latitudinem, angulumque vt ſupra cum meridiano, quos habet h. 23. extante Sole in ♑. & in eadem Tabula ponuntur pro vmbrę latitudine p. 82. m. AS. A. & pro eodem angulo gr. 45. m. 59. A. partis Auſtralis, vt connotat A ſupra eoſdem numeros, nam totum ſpatium directum ad ♑ & A eſt Auſtrale, reliquum reſpiciens ♋ eſt ſeptemtrionale.

His cognitis operationem proſequatur, vt operatus fuit in inueniendo puncto I hor. 23. ♋, ſumendo ſcilicet in gnomonis extenſione p. 82. à ſigno ☽ ad ♃, cum his ducendo quadrantem ad partẽ Auſtralem CKA, nam numeratis in ipſo gr. 45. m. 1. ſeu gr. 45. per lineam pariter à centro B, vt BK. patebit in quadrante CA, punctum K quod erit aliud quæſitum punctum lineæ 13. extante Sol in ♑, ab his deinde punctis ducat lineam IK, ipſaque erit linea hor. 23. quæ etiam inſeruiet morante Sol in cæteris ſignis Zodiaci, nam ſigna ♋, & ♑ ſunt termini acceſſus, & receſſus ☼ à noſtro Vertice, vt latius dictum fuit ſupra.

Duodecimo pro inueniendis duobus punctis horarum 22. 21. 20. 19. 18. 17. 16. operetur ſimiliter vt ſupra operatus fuit inuenturus I. K duo puncta lineæ horariæ. 23. latitudo vmbræ pro h. 22. ☼ in ♋ eſt p. 34. 12. ideo numeratis his partibus 34. in extenſione gnomonis vt ☽ ♂, & ducto quadrante OLN, & in hoc ſumptis gr. 75. 48'; vel gr. 76. anguli verticalis h. 22. ♋, & Meridiani habetur primum punctum L pro primo termino lineæ 22. ♋; pro noſcendo altero puncto eiuſdem h. 22. latitudo vmbræ h. 22. ☼ in ♑ eſt p. 45. 7. angulus verticalis cum meridiano gr. 32. 46. cum ſemidiametro p. 45. ductus fuit quadrans QMR, & cum gr. 35. aliud quæſitum punctum M, vnde tota linea pro hor. 22. LM, & ſic de alijs prout ex figura demonſtrante operationes, Hicq; animaduertatur quòd hora 18. ſemper tranſire debet per interſecationem, quam facit linea æquinoctialis cum Meridiana, alias eiuſdem linea male ducta eſſet.

Animaduertãtur inſuper accurate ſigna S; & A. poſita in Tabulis, quæ vt diximus cõnotant partes, ad quas formari debent quadrantes, & notari puncta horarum.

Sic præ oculis habeatur ea dictio meridie etiam in eiſdem Tabulis inſcripta quæ demonſtrat horas Antemeridianas, ac poſt meridianas, ideoque horarum puncta debere eſſe in parte ante meridiana, vel poſt meridiana vt in noſtro exemplo puncta horarum 9. 10. 11. 12. 13. 14. 15. 16. ſunt omnia antemeridiana, & reliqua poſt meridiana, ideo illa neceſſario debent eſſe ante lineam meridianam, & cętera poſt eamdem lineam Meridianam.

Qui

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Qui cupiet ſupputare ex ſe Tabulas has, etiam ex ſe facile cognoſcet partes ſeptemtrionalem, ac Auſtralem;nam vbi inueniet angulum verticalis Horæ cum meridiano minorem gr. 90. ſciet ibi quoque eſſe partem ſeptemtrionalem, ſi maiorem gr. 90. habebit Auſtralem, & poſt curſum gr. 180. iterum Septemtrionalem.

Meridiei momentum faciliùs cognoſcet ſubtrahendo arcũ ſemidiurnum, vel ſeminocturnum Solis ab hor. 24. nam à reſſiduo tempus meridiei cognoſcetur: ex. gr. extante Sole in principio ♋ eius arcus ſemidiurnus in altitudine poli gr. 44. 29'. eſt h. 7. 41.; quæ ſubtractæ ab h. 24. relinquunt h. 16. 19. igitur merid. in hac poli altitudine & Sole in ♋ fiet inter h. 16. & 17.; ſic arcus ſeminocturnus Solis in principio ♑ eſt. h. 4. 19., quæ demptæ ab h. 24., dant h. 19. 14. quare in eadem poli altitudine, & ☼ in ♑, erit meridies inter h. 19. & 20.

Tertiodecimo pro inueniendis duobus punctis horarum 15. 14. 13. primum ♋ inueniat prout ſupra de alijs horis, deinde, quoniam hæ horæ non ſunt diurnæ extante ☼ in ♑, aliud punctum ſcrutetur auxilio lineæ æquinoctialis EF, & ſic ratiocinando, quod in ea æquinoctiali, per munera Æquatoris quæ ſupra in puncto 17. deſcripſimus, tam diſtare debet hora 21. ab h. 18. quam hora 15. ab eadem h. 18. propter æqualia interualla, ita h. 14. ab h. 18. quam ab hac h. 22; ac huiuſmodi hor. 13. ab eadem h. 18. quam 23. cum qua regula poterit probare quoque h. 16. & 17. illa enim debet diſtare ab h. 18. ſicuti h. 20. aliaq; ſicut h. 19. at ſemper in Æquatore EF, ideo pro h. 15. 14. 13. habebit alia quæſita puncta TVX, quibus mediantibus, & iam inuento puncto ♋ extendet et iam lineas horarias pro h. 15. 14. 13.

Quartodecimo pro h. 12.; inuento eius primo puncto morante ☼ in ♑, vt in alijs conſtructis horarijs lineis, ducat ſemper parallelam lineam ad primarium verticale ſuppoſitum C. D. eritque linea pro h. 12. excipiat tamen in Altitudine poli gr. 45. vbi h. 12. coincidit cum verticali eodem.

Quintodecimo pro conſtruendis lineis horarũ 11. 10. 9. accipiat pariter more ſolito, punctum earumdem verſante ☼ in ♋, deinde pro hor. 11. habebit aliud punctum, vbi linea hor. 23., ac in is interſecat æquatorem EF. ità pro hor. 10. aliud punctum Z, vbi h. 22. interſecat æquatorem nec non pro h. 9. punctum, & hor. 21; ductiſque lineis hor. 15. 14. 13. 12. 11. 10. 9, ad placitam longitudinem, quoniam hæ horæ certum terminum non habent, completum erit Horizontale ☼ horologium, quod quærebatur.

E t

Et quãquam lineę omnes, & quadrantes ſint in figura apparentes, tù tamen facias ſemper non apparentes, exceptis lineis Horarum, ac Æquinoctialis, ſic enim practicari ſolet, & nos reddidimus omnes apparentes ob maiorem in hac ſcientia Candidatis dilucidationem.

Sed ſi tibi conſtruendum eſſet Horizontale ☼ Horologium ad aliam Poli Altitudinem à gr. 39. vſque ad 46. excluſiue vtere alia Tabula competenti inuentę Altitudini poli, alias enim ſuperaddidimus quoque Tabulas pro eadem Horologij conſtructione, vt ad maiorem tui commoditatem in ſequentibus proſpicies.

Tabulæ pro conſtruendo Horologio Horizontali.

In Altitudine poli gr. 40.

Diei Horę	Vmbræ latitud. P	Occid.	M	☼ in ♋ Angul. Ver. Horarum, & Merid. G		M	Diei Horę	✵ in ♑ Vmbrę latitudo. P. Occid.	M.	Ang. Vert. Horarum, & Merid. G.		M.
23	66	S	36	67	S	50	23	74	59	48	A	24
22	30		96	76		31	22	39	13	36		45
21	18	A	83	85	A	85	21	28	30	23		28
20	12		43	58		2	20	24	36	8		46
19	8		32	72		45	19	24	22	6	Merid.	32
	5		46									
18	3		76	55		58	18	27	41	22		23
17	3	Merid.	90	20	Merid.	2	17	36	53	34		54
16	5		81	26		19	16	74	59	46		47
15	8		83	57		25	15	282 Orié.	45	57		11
14				74		49	14			66		32
13	13	S	18	86	S	38	13			75		16
12	20		10	33		57	12			83		57
11	33		79	75		16						
10	78		42	66		32						
	Orien.											

In

In Altitudine poli gr. 41.

Diei Horę	☉ in Cancr. Vmbrę latitud. P	Occid.	M	Anguli Vert. Horar. & G	Merid.	M	Diei Horę	☉ in Capric. Vmbrę latitud. P	Occid.	M	Anguli Verticalis Horarum, & G	Merid.	M
23	67	S	31	67	S	31	23	76		13	47	A	42
22	31		54	76		27	22	40		32	35		54
21	19	A	21	85	A	24	21	28		44	22		33
20	12		73	84		39	20	26		1	7		54
19	8		59	72		11	19	25		59	7	Meridies	18
18	5		74	53		32	18	29		50	22		0
17	4	Me-	2	21	Me-	14	17	41		9	35		24
16	4	rid.	6	22	rid.	52	16	84		6	47		15
15	5		82	54		28	15		Orien.		57		43
14	8		52	72		45	14				67		10
13	12	S	94	85	S	8	13				76		5
12	19		55	85		3	12				85		3
11	32		29	76		5							
10	70		57	67		10							
	Orien.												

In Altitudine poli gr. 42.

Diei Horę	☉ in Cancr. Vmbrę latitud. P	Occi.	M	Anguli Vert. Horar. & G	Merid.	M	Diei Horę	☉ in Capric. Vmbrę latitud. P	Occid.	M	Anguli Verticalis Horarum, & G	Merid.	M
23	68	S	9	67	S	10	23	77		39	46	A	59
22	32		1	76		19	22	41		51	35		1
21	19	A	63	85	A	30	21	30		58	21		37
20	13		17	84		20	20	27		26	7		0
19	8		89	71		43	19	27		34	8	Meridies	5
18	6		1	53		13	18	31		59	22		38
17	4	Me-	30	22	Merid.	25	17	45		25	35		56
16	4	rid.	22	25		32	16	103		6	47		46
15	5		84	51		29	15		Orien.		58		17
14	8		64	70		36	14				67		51
13	12	S	70	83	S	33	13				76		57
12	19		2	86		12	12				86		12
11	30		89	76		57							
10	64		2	67		51							
	Orien.												

In Altitudine poli gr. 43.

☼ in ♋.	Vmbræ latitud.			Anguli Vert. Horar. &				☼ in Capric. Vmbræ latitud.			Anguli Verticalis Horarum, &		
Diei Horę	P	Occid.	M	G	Merid.	M	Diei Horę	P	Occid.	M	G	Merid.	M
23	70	S	45	66	S	47	23	79	A	50	46	A	11
22	32		86	76		8	22	43		14	34		7
21	20	A	6	85	A	33	21	32		23	21		39
20	13		40	84		5	20	28		80	6		4
19	9		19	71		18	19	29	Merid.	74	8	Meridies.	53
18	6		31	53		1	18	34		12	23		18
17	4	Merid.	57	23	Merid.	33	17	47		68	36		30
16	4		40	16		23	16	122		12	48		19
15	5		89	48		29	15		Orien.		58		53
14	8		57	68		24	14				68		34
13	12	S	47	81	S	55	13				77		52
12	18		52	87		24	12				87		24
11	29		58	77		52							
10	58		55	68		34							

Orien.

In Altitudine poli gr. 44.

☼ in ♋.	Vmbræ latitud.			Anguli Vert. Horar. &				☼ in Capric. Vmbræ latitud.			Anguli Verticalis Horarum, &		
Diei Horę	P	Occid.	M	G	Merid.	M	Diei Horę	P	Occid.	M	G	Merid.	M
23	71	S	96	66	S	21	23	81		36	45	A	23
22	33		58	75		55	22	44		28	33		11
21	20	A	53	85	A	32	21	33		27	19		40
20	13		78	83		54	20	30		15	5		7
19	9		51	70		58	19	30		48	9	Meridies.	43
18	6		62	52		54	18	36		17	24		0
17	4	Merid.	86	24	Merid.	40	17	53		57	37		7
26	4		60	13		22	16	141		7	48		54
15	5		94	45		27	15		Orien.		59		31
14	8		50	66		7	14				66		21
13	12	S	25	80	S	15	13				78		51
12	18		2	88		40	12				88		40
11	28		36	78		51							
10	53		90	9		21							

Orien.

	☉ in ♋							☉ in ♑					
Diei	Vmbræ Latitudo			Anguli Verticalis Horarũ, & Merid.			Diei	Vmbræ Latitudo			Anguli Vercalis Horarũ, & Meridiani.		
Horę	P	Occid.	M	G		M	Horę	P	Occid.	M	G		M
23	73	S	68	65	S	53	23	83		54	44	A	33
22	34		33	75		40	22	45		45	32		14
21	21	A	0	85	A	29	21	34		18	18		40
20	14		15	83		47	20	30		39	4		10
19	9		84	70		45	19	31		35	10	Merid.	34
18	6		94	52		51	18	38		20	24		44
17	5	Me-	15	25	Merid.	46	17	57		33	37		46
16	4	rid.	79	10		30	16	158		28	49		32
15	6		0	42		26	15		Orien.		60		13
14	8		44	63		46	14				70		10
13	12	S	6	78	S	29	13				79		54
12	17		56	0		0	12				0		0
11	27		22	79		54							
10	49		86	70		10							
9	175	Orien.	27	60		13							

Horo-

Horologia quæcumque Verticalia ad quamcumque Planorum Verticalium cum Ortu, Occaſu, Meridie, ac Septemtrione habitudinem iuxta modernos Sciotbericologos etiam facilè ad quamcumque Poli eleuationem delineare.

PVNCTVM CIV.

Plana Verticalia appellantur ea, quæ Horizonti ſunt perpendicularia, vt ſunt parietes Domorum, Turrium, &c.

Quarè ſi delineandum ſit Horologium in aliquo horum Planorum Verticalium, primò iuxta edocta in antecedenti puncto 49. quæratur diligenter habitudo, quam habet planum Verticale, aut Murus cum Ortu, Occaſu, Meridie, ac Septemtrione, an patiatur declinationem, aut non, ac ſi ſic, quantam declinationem, & quam, vel quas earumdem Mundi partium principalium reſpiciat, prout ex eodem puncto 49. ſiue alia methodo, caueatq; ab errato, totum namque Horologium vero non conueniret.

Secundò cognita habitudine Muri cum ſupradictis Mundi partibus ſume Gnomonis magnitudinem ad libitum, diſcretam tamen ſecundum eiuſdem Muri capacitatem, quam magnitudinem gnomonis, modo ſuppones conſtare partibus decem, & vt etiam alias monuimus.

Tertiò ſi Murus præcisè Meridiem aſpiciat ſupputa vmbrarum
Latitudines per punctum 50,
Si Boream per punctum 51.
Si Orientem per punctum 52.
Si Occaſum per punctum 53.
Si declinet à Meridie ad Ortum per punctum 54.
Si à Meridie in Occaſum per punctum 55.
Si à Septemtrione ad Ortum per punctum 56.
Si à Septemtrione in Occaſum per punctum 57.

Omnes autem vmbrarum longitudines pro Muris ſiue declinantibus, ſiue non per punctum 58.

Quartò notis Vmbrarum latitudinibus, & longitudinibus fac tibi Inſtrumentum, vt infrà, quod vulgo dicitur *Squadra* quod diuide ſi potes in minimas partes, ita quod tamen partes decem ſint æquales longitudini aſſumpti Gnomonis, ſeruataq; hac proportione potes extendere ad libitum diuiſionem.

Quintò duc ad angulos rectos in interſecatione lineas rectas ABCD

 vt

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vt in Horologij figura, quæ ſequetur, vbi linea A B. connotabit Horizontalem, verticālem vero linea CD.

Sextò auxilio normæ, aut rectanguli rectilinei iam diuiſi, nota latitudines vmbrarum in linea verticali, longitudin es autem in alio latere rectanguli, quia vbi terminauerit habebitur punctum, ac puncta per quæ ducta recta linea ipſa erit linea horaria quæſita: antea tamen animaduertes exactè an vmbrarum latitudines ſint dextræ, vel ſiniſtræ, ſicque delineandæ, vel ad manum dextram, aut ſiniſtram, habito centro, vbi lineæ verticalis, ac horizontalis interſecantur: ſic animaduertes an earumdem Vmbrarum longitudines ſint Meridionales, vel Septemtrionales vt expoſuimus in dicto puncto 58. vt ſic cognoſcere poſſis an dictæ longitudines accipiendæ ſint ad partem Au-

10. 20. 30. 40. 50. 60. 70. 80. 90.

100. 90. 80. 70. 60. 50. 40. 30. 20. 10.

ſtralem, vel Borealem, vt in antecedentibus declaratum fuit.

At exemplo res fiet clarior: Sit delineandum Horologium verticale ☼ in Muro declinante à Meridie in Occaſum gr. 25, & ad quam plani habitudinem ſupputatæ fueruut pro horis ♋, & ♑ vmbrarum latitudines, ac longitudines vt infra.

Pro horis ♑	Latitudines			Longitudines		
16	35	30	Siniſtra	3	45	A
17	19	11	Siniſtra	4	86	A
18	11	63	Siniſtra	5	5	A
19	6	97	Siniſtra	4	77	A
20	3	71	Siniſtra	4	28	A
21	1	1	Siniſtra	3	59	A
22	1	36	Dextra	2	70	A
23	3	64	Dextra	1	54	A

Pro

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Pro horis ♋	Latitudines		Longitudines		
15	26	Siniſtra	56	23	A
16	7	Siniſtra	27	98	A
17	o	Dextra	24	o	A
18	5	Dextra	20	7	A
19	10	Dextra	17	82	A
20	16	Dextra	16	61	A
21	26	Dextra	16	48	A
22	52	Dextra	18	89	A
23	491	Dextra	81	o	A

Hiſce cognitis incipias delineare horologium tuum cum horis habentibus nota puncta in vtroque Tropico, quare hic ab h. 16., nam hor. 15. habet tantum notum punctum in ♋.

Et ſic ab horis ♑, cuius eſt pars Meridionalis, quam reſpicit Murus in aſſumpto exemplo, incohabis.

Hora 16. ♑ habet p. 35. 30. latitudinis ſiniſtræ numerandas in AB linea horizontali ab E verſus F parte ſiniſtra, longitudo autem eiuſdem h. 16. p. 3. 45. numeranda eſt ab F verſus G auxilio Normæ prædictæ, quæ prout habens duo diuiſa latera fauebit vtriq; menſuræ latitudinis, ac longitudinis, vt videbis in figura ſequenti pro hoc exemplo, ſicque habebis cognitum pũctum in G; ſed & quia aliud quoq; punctũ neceſſe eſt inuenire, inuenies per hor. 16. ♋, cuius latitudo ſiniſtra eſt p. 7. 55. ac longitudo 27. 98. ſumendo menſuras auxilio ſupradictæ Normæ, vt feciſti pro inueniendo antecedenti ♑ puncto, habebiſque aliud punctum in H, vnde ducta recta linea à G in H ipſa erit quæſita horaria linea GH pro h. 16. ac huiuſmodi in delineatione cæterarum horarum habentium cognita puncta in vtroque Tropico, ducendoque ſemper longitudines earumdem horarum ab E verſus D, omnes enim habent Auſtralem denominationem.

Ac niſi velles vti ſupradicta Norma poteris vti lineis perpendicularibus ducendis per punctum vbi terminat horæ latitudo, & eam partem verſus, cuius eſt denominationis longitudo, ac quas terminabis cum quantitate longitudinis horę, vt etiam videbis in exemplo perpendicularem IH; & quam longitudinem habebis inuentam in linea extenſi Gnomonis, prout factum fuit ſupra pro delineatione Horologij Horizontalis, ſuppoſita tamen in his diuiſione Gnomonis in decem partes, vbi in Horizontalibus ſuppoſitum fuit conſtare duodecim.

Sed quid ſi habes vnum tantùm punctum horæ, quod ſuſcipi poteſt à Mu-

Muro propter ſuam habitudinem cum Meridie, vel Septemtrione &c. Et non aliud alterius Tropici cum oporteat pro æqua lineę horarię delineatione ſaltem habere cognita duo puncta?

Reſpondeo recurrendum eſſe ad remedia ſubſidiaria, gradatim tamen vt explicabimus.

Hæcque ſunt primo: inuenire latitudinem, vmbræque longitudinem pro hora, cuius habes aliud punctum defficiens etiamſi momento eiuſdem horæ Sol infra Horizontem commoraretur per regulas eaſdem in ſuperioribus traditas.

Verbi gr. in noſtro aſſumpto exemplo, h. 15. habet vnicum tantum punctum cognitũ in ♋, & nõ aliud in ♑, quia nobis extante ☼ in ♑ h. 15. ☼ eſt ſub Horizonte, nihilominus quæretur latitudo, & longitudo, prout ſi ☼ eſſet ſupra Horizontem; in ſupputanda autem longitudine accipienda erit depreſſio ☼ de qua tractauimus in puncto 41.

Et ecce tibi calculum in aſſumpto exemplo ac Poli eleuatione gr. 44. 29'. circumferentia horizontalis hor. 15. ♑ gr. 59. 50.; quæ eſt Orientalis Auſtralis, ideò per primam Regulam de Muris declinantibus à Meridie in Occaſum eidem addenda eſt declinatio Muri gr. 25. quæ ſuppoſita ſic fuit, quare erit arcus gr. 84. 50'. ac Tangens pro quæſita latitudine ſiniſtra 110. 59'.

Sed pro eiuſdem horæ 15. longitudine, prius ſupputanda eſt depreſſio ☼ ſub Horizonte ad momentum eiuſdem hor. 15. ♑, & quam ſupputatam habebis gr. 3. 21. quorum M. 876741
Dictæ hor. 15. arcus latitudinis gr. 84. 50. T. 1104550

Tangens longitudinis 6. 50. ex proximiori M. 981291

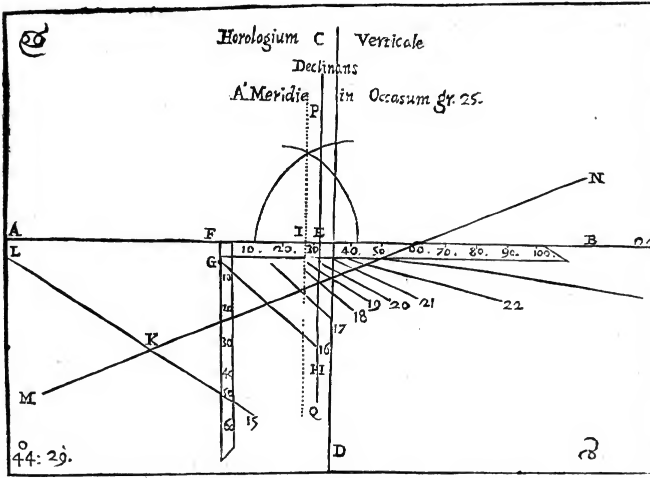
Hiſque cognitis habebis quoque nota duo puncta, per quæ iuxta methodum eandem ſupradictam poterisquoque ducere lineam hor. 15; vt videbis quoque in Horologij figura ſequenti.

Primus horas cæteras Orientales nõ quæres deſcribere ſuper hoc planum, quoniam, vt monuimus, in præcedentibus, ab ipſo ſuſcipi non poſſunt.

Secundus modus, vt inuenias aliud punctum, vbi vnicum tantum habes cognitum eſt per ſupputationem latitudinis, ac longitudinis Vmbrarum eiuſdem horæ in initijs ſignorum æquinoctialium ♈ ♎, ſiue in partibus aliorum Zodiaci ſignorum, quæ poſſint à Muro ſuſcipi.

Tertius tandem, eſt vſus latitudinum ortiuarum menſurandarum ſemper in linea horizontali ad dextram, vel ſiniſtram, prout in antecedenti

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Horologium C Verticale
Declinans
A Meridie in Occasum gr. 25.
A
F
I
E
B
L
G
P
N
K
M
H
Q
D
10. 20. 30 40. 50 60. 70. 80. 90. 100.
15
16
17
18
19
20
21
22
44: 29.

denti puncto expoſitus fuit.

Vndè cognitis duobus punctis ducere poteris horariam lineam quęſitam, eiſdem modis, qui ſupra dati fuerunt.

Pro notanda æquinoctiali linea in quolibet Horologio verticali, ſume latitudines, ac longitudines vmbrarum cum duabus horis eiuſdem Æquatoris, ſuppoſito ſcilicet ☼ in ♈ vel ♎, nam inuentis per ipſas duobus punctis æquinoctialibus, quæ à Muro ſuſcipi poſſint, & per eadem puncta ſi ducatur recta linea, ipſa erit æquinoctialis quæſita.

Exempli gratia in noſtro aſſumpto exemplo, pro ducenda æquinoctiali linea MN, fuerunt inuentæ in Æquatore poſito ☼ latitudines, ac longitudines, pro hor. 15. & 21. ac conſequenter eadem practica, de qua ſupra, fuerunt inuenta puncta KL, per quæ ducta fuit æquinoctialis linea MN.

Pro linea Meridiana deſcribenda duc parallelam lineam verticali CD, quæ tranſeat per punctum O, vbi horaria linea hor. 18. ſe interſecat cum linea Æquinoctiali, ac huiuſmodi habebis PQ quæſitam lineam Meridianam.

ADNOTATIONES.

Nota pro coronide, quod deſcripto verticali Horologio, declinante à Meridie in Occaſum, aut à Septemtrione in Occaſum, vel à Meridie in Ortum, ſiue Septemtrione in Ortum, poteris, vno deſcripto, aliud quoque oppoſitum deſcribere eiſdem vmbrarum proportionibus, habito etiam reſpectu, quod ſit eadem Muri declinatio, & ſit retenta à Muris habitudo ad Occaſum, vel Ortum, prout habuit primum Horologium deſcriptum, procedit enim ſolum in variatione Meridiei in Septemtrionem, aut è contra.

Res clarior exemplo fiet: cum habes delineatum horologium declinans à Meridie in Occaſum gr. 25. aut alia quantitate, habes quoque pro horis complementi vmbrarum proportiones Muri declinãtis à Septemtrione in Occaſum gr. 25. ſiue alia quantitate, dummodo tamen Verticale Planum declinans à Septemtrione in Occaſum habeat ęqualem declinationem ei, quam habet aliud verticale Planum declinans à Meridie in Occaſum, vt etiam ſupra dictum fuit.

Quare cum habeas ſupra deſcriptum verticale Horologium declinãs à Meridie in Occaſum gr. 25. habebis quoque vmbrarum proportiones cognitas pro Muro declinante à Septentrione in Occaſum eiſdem gr. 25 vnde etiam ipſis poteris erigere Horologium pro plano Verticali declinante à Septemtrione in Occaſum gr. 25. At in huius Horologij oppoſiti

deli-

delineatione, ſicuti etiam pro delineatione cæterorum oppoſitorum, debebis vmbrarum latitudinibus mutare titulos de ſiniſtris in dextras, de dextris in ſiniſtras, ſic earumdem longitudinibus titulos Auſtrales in Septemtrionales, ac è conuerſo, pariterque latitudines, & longitudines attributas ſignis Auſtralibus, vt ♎ impartiri Borealibus, vt ♋, dataſque Borealibus aſſignare Auſtralibus.

Et huiuſmodi quoq; fient mutationes, cum erit delineatum prius Horologium à Septentrione in Occaſum, velitque reduci in aliud à Meridie in Occaſum.

Proceduntque etiam Regulæ, quando Plana eadem quantitate declinarent ad Ortum.

Neque vti debebis eiſdem horis in primo Horologio deſcriptis, ſed debebis vti earum complementis, reſſiduo ſcilicet ad hor. 24. vt hor. 9, ſunt complementum hor. 15. ſic hor. 10. ſunt complementum h. 14. &c.

Secundò nota, quod antequam deuenias ad ſupputationem longitudinum, & latitudinum Vmbrarum pro hiſce Horologijs accurate animaduertere debes in genere quænam horæ à tuo Muro ſuſcipi, ac demonſtrari poſſint, vtendo eiſdem ratiocinijs, quæ tulimus ad Punctum de Planis declinantibus. num. 49.

Tertio nota quod pro delineatione Horologij Horizontalis poteris etiam vti Norma, qua ſupra vſus fuiſti pro deſcriptione Verticalis, ſed debebis priùs habere ſupputatas vmbrarum longitudines Horizontales, prout expoſuimus in puncto 60. & latitudines in proportione Tangentium, & ad maius tui commodiì iuxta punctum 48. in reliquis regulæ cæteræ expoſitæ ſupra pro conſtructione Horizontalis Horologij per angulos verticalium horarum cum Meridiano militabunt etiam in hac alia delineatione, vbi opus erit.

Quartò nota, poſſe etiam, ſecundum iacta etiam antecedenter fundamenta, delineari Verticalia Horologia per arcus Horizontales eo modo, quo docuimus delineationem Horologiorum Horizontalium, hoc excepto quod vt cognoſcatur in qua parte figi debeant pro delineationibus linearum horariarum puncta, animaduerti debet loco veri Meridiei, tempus vmbræ breuioris in Plano verticali, ſic enim noſcetur an puncta figenda ſint ante vel poſt lineam verticalem, quia in Horizontalibus diximus habendam eſſe rationem ad verum tempus Meridiei, in alijs conueniunt denominationes arcuum horizontalium.

Quintò nota eiſdem Regulis vti etiam poſſe pro conſtructione Horologiorum Aſtronomicorum, quæ ſuum initium à Meridie, Babiloni-

corum, quæ ab Ortu ☉ ſuum initium ſumunt, & cæterorum quorumcumque bene animaduerſis fundamentis, de quibus ſupra, communibus quibuslibet ſpeciebus Horologiorum Solarium.

De Conſtructione Horologij in Quadrante.

PVNCTVM CV.

EX præcedentibus quoque conſtrui poſſunt horologia in quadrante quolibet, & ad quamlibet poli eleuationem.

Et pro Conſtructione colligantur in data Poli altitudine iuxta punctum 40. Altitudines Meridianæ ☉, quas ☉ habet dum verſatur in quolibet initio ſignorum Zodiaci, & quæ in altitudine poli gr. 44. 29'. habebitur, vt infra.

Altitudines Meridianæ ☉.

In ♈ ♎	gr.	45.	31.
♉ ♍	gr.	57.	1.
♊ ♌	gr.	65.	43.
♋	gr.	69.	1.
♏ ♓	gr.	34.	1.
♐ ♒	gr.	25.	19.
♑	gr.	22.	1.

Pariformiter ſupputentur Altitudines ☉ ad quamlibet horam, qua ☉ intueri poſſit, dum eſt in initijs ♋ ♑, & in punctis æquinoctiorum ♈ vel ♎, vt in ſupradicta eadem Poli Altitudine fuerunt calculatæ, iuxta ſequentes

Alti-

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Altitudines. ☼

Hor.	in ♋		♈ ♎		♑	
9	3.	21			0	
10	13.	0.				
11	23.	19.	0.			
12	33.	57.	0.	0		
13	44.	35.	10.	39		
14	54.	47.	20.	54		
15	63.	33.	30.	17		
16	65.	53.	38.	9	5.	22
17	67.	23.	43.	33	12.	42
18	60.	36.	45.	31	18.	13
19	51.	9.	43.	33	21.	22
20	40.	43.	38.	9	21.	53
21	30.	2.	30.	17	19.	40
22	19.	29.	20.	54	14.	58
23	9.	22.	10.	39	8.	14
24	0.	0.	0.	0	0.	0

Hiſce præparatis ſit Quadrans, in quo vult delineari Horologium ABC-

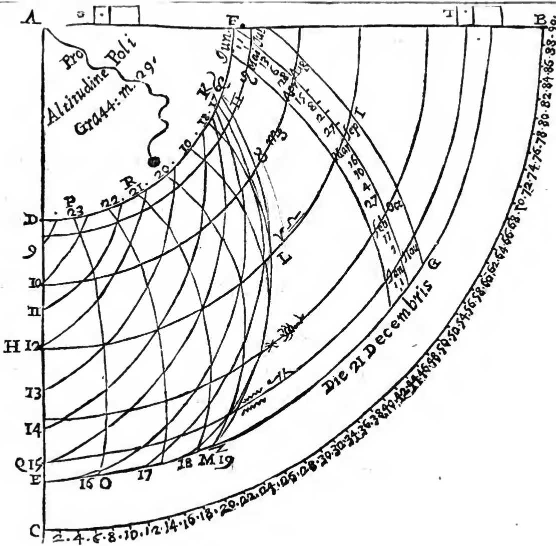
Primò diuidatur in ſuas partes 90. vel ſaltem ad maximam vſque Altitudinem ☼ Meridianam, vt ſupra gr. 69. 1; quę diuiſio ſolum neceſſaria eſt, etsi nos integre diuiſerimus ob maiorem candidatis intelligenitam.

Secundò in latere quadrantis vt AC ſumantur ad libitum duo ſpatia ſicut D, & E; factoque ſemper centro in A, ducantur ex interuallo AD portio circuli DF, atque ex interuallo AE portio circuli EG; eaque erit pro circulo ♋, hæcque pro circulo ♑.

Tertiò DE biſariam diuidatur vt in H, factoque interuallo AH ducatur altera circuli portio H I, quæ inſeruiet pro æquinoctiali.

Quartò cum auxilio diuiſi Quadrantis ſumatur in DF circulo ♋ huius Altitudo Meridiana gr. 69. 1, facto ſemper centro in A, eritque K, ſic in L. altitudo Meridiana ♈ ♎ gr. 45. 31'; pariter in M. Altitudo Meridiana ♑ gr. 22. 13, & deinde per tria puncta KLM, ducta, iuxta doctrinam geometricam, circuli portione, habebitur KLM, pro Horologio quadrantali, Meridiana.

 Quin-



Pro Altitudine Poli Grad 44. m. 29'
Die 21 Decembris

Quintò quoniam hæc Horologij Theoria dependet ab eo , quod cognita Altitudine ☉ ab Horizonte poteſt optimè cognoſci hora diei,eaque Altitudo accipitur auxilio Quadrantis, ſumantur Altitudines ☉ in ♋ ♈ ♎, & ♑, primo pro h. 23. & gr. 9. 22'. competentes hor. 23. ♋ adnotetur in P, ſic gr. 10. 39'. pro æquinoctijs menſurentur in N, & ita grad. 8. 14. pro hor. 23. ♑ in O, & ſemper ope diuiſi Quadrantis, & facto centro in A, deinde trahatur , vt ſupra more geometrico, per tria puncta PNO portio circuli, quæ erit horaria PNO pro hor. 23, ac huiuſmodi pro cæteris horis pomeridianis reſpectu ♋ 22.21.20.19.18.17. ac antemeridiana 16. in his enim omnibus erunt cognita tria puncta, vnum in ♋, aliud in ♈ ♎, ac tertium in ♑.

Sextò in H deſcribatur hor. 12. competens Orienti ☉ in æquinoctijs.

Septimó pro hor. 15. 14. 13. erunt cognita duo puncta mediantibus antecedenter ſupputatis ☉ Altitudinibus vnum in ♋,aliudque in ♈ ♎ tertiumq; punctum inuenietur recurrendo ad horas iam deſcriptas, nã diſtantia DR horæ ſcilicet 21. ab hor. 24. inſeruiet quoque pro diſtantia HQ horæ 12. ab hor. 15, vnde erunt etiam cognita tria puncta, per quæ ducta portio circuli, vt in alijs, ipſa erit horaria 15. pariter pro hor. 14. 13. habebuntur duo puncta, vnum in ♋, aliud in ♈ ♎, tertiumque ex diſtantia hor. 22. ab hor.24. pro tertio puncto hor. 14., & h. 23. à 24. pro hor. 13. tertio puncto.

Horæ 11. 10. 9. habent vnum punctum in ♋, aliud ex eo quia hor. 9. ſit, vt diſtet ab hor. 12. quam ab hac hor. 15. ſic hor. 10. ab hor. 12. quam ab hac hor. 14. & hor. 11. à 12. quam hor. 13. ductiſque, vt ſupra circulorum portionibus per duo puncta, quæ ſolum in his horis ſatisfacere videntur, erit completum Horologium in Quadrante, quod quærebatur.

Et cum hoc horologio cognoſcetur hora diei auxilio perpendiculi demiſſi ab A, & in quo ſit nodulus volubilis, & adaptabilis diei Menſis, qua quęritur hora,nam ſumpta Altitudine ☉, mediante huius ingreſſu, per radios in Foramina S T, perpendiculum eam indicabit in diuiſione Quadrantis, noduluſque prædictus horarium circulum, cui ea, quæ correſpondebit hora, ipſa erit hora quæſita: latius à figura Quadrantis hæc omnia explicantur.

Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum	Latitudo		Longitudo		Differẽtia temporis		In mot. Plan.	In Aſpectibus
	G	l	G	l	H	l		
Acedem *Ceneda*	45	18	33	22	0	4	A	S
Adrianopolis in Thracia	43	12	51	45	1	9	S	A
Alba regalis Vngariæ	46	48	42	50	0	33	S	A
Album Caſtrum Tranſ.	48	35	50	45	1	5	S	A
Alemaria Hollandiæ	43	30	30	0	0	18	A	S
Alexandria Italiæ	52	40	26	15	0	33	A	S
Almoiſa Hiſpaniæ	44	45	10	30	1	36	A	S
Amberga Bohemiæ	49	28	34	20	0	1	A	S
Ambianum Picardiæ	49	50	22	30	0	48	A	S
Amiens	49	20	23	40	0	43	A	S
Amſtelrodamum	52	20	26	30	0	32	A	S
Andegauia Galliæ	46	0	19	30	0	20	A	S
Ancona Italiæ (Taurũ	43	42	36	40	0	9	S	A
Antioch. Syr. penes mõtem	37	20	70	15	2	23	S	A
Antuerpia Brabantiæ	51	16	27	0	0	30	A	S
Aquila	42	46	39	0	0	18	S	A
Aquileia Hiſtriæ	45	12	34	0	0	2	A	S
Aquinum	41	56	38	30	0	16	S	A
Aquiſgranum Imperiale	50	48	28	0	0	26	A	S
Aretium Hetruriæ	42	45	35	15	0	3	S	A
Argentoratũ. *Argentina.*	48	30	29	50	0	19	A	S
Ariminum Italiæ	43	50	37	0	0	10	S	A
Aſſiſium	42	55	35	20	0	3	S	A
Athenæ	47	15	52	45	1	13	S	A
Auenio Galliç *Auignone*	43	20	26	30	0	32	A	S
Auguſta Vindelicorhm	47	42	33	0	0	6	A	S
Aurelia Galliæ. Orliens	47	15	22	20	0	49	A	S
Bamberga Franconiæ	49	56	31	45	0	11	A	S

Bar-

Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo G	l	Longit. G	l	Differẽtia temporis H	l	In mot. Plan.	In Aſpectibus
Barcinũ Hiſp. *Barcellona*	41	30	18	0	1	6	A	S
Barium	41	7	43	40	0	37	S	A
Baſilea Eluetiæ	47	30	28	30	0	24	A	S
Bello gradum Vngariæ	44	30	45	15	0	43	S	A
Beneuentum	41	30	38	15	0	15	S	A
Bergomum	44	50	30	30	0	16	A	S
Berlinũ Mar. Brandemb.	52	50	36	30	0	8	S	A
Berna Heluetiæ	46	25	31	45	0	11	A	S
Biſantiũ Galliæ *Beſanſon.*	47	36	25	40	0	35	A	S
BONONIA Italiæ	44	29	34	30	0	0		
Brandeburgum	52	23	36	28	0	8	S	A
Brema	53	12	31	15	0	13	A	S
Brixia	44	30	31	20	0	13	A	S
Brugæ Flandriæ	51	20	24	35	0	40	A	S
Brunduſium	41	27	44	30	0	40	S	A
Bruxellæ Brabantiæ	50	48	27	0	0	30	A	S
Buda Hungariæ	47	0	44	30	0	40	S	A
Burdigala Galliæ	45	30	18	30	1	4	A	S
Burgos Hiſpaniæ	44	40	16	0	1	14	A	S
Camerinum	46	0	36	0	0	6	S	A
Campena Friſiæ	52	50	11	46	0	50	A	S
Cantuaria Angliæ	51	20	20	30	0	56	A	S
Capua Italiæ	41	42	40	0	0	22	S	A
Caroloſtadiũ Franconiæ	50	5	27	40	0	27	A	S
Cartago Barbariæ	31	50	31	48	0	11	A	S
Caſalis S. Euaſij	42	37	30	42	0	15	A	S
Caſchouia Vngariæ	48	20	46	0	0	46	S	A
Caſſellæ	51	18	33	25	0	4	A	S

Ca-

Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo		Longit.		Differẽtia temporis		In mot. Plan.	In Aſpe-ctibus.
	G	l	G	l	H	I		
Catina Siciliæ	38	40	39	46	0	21	S	A
Cephalonia Inſula	37	10	47	10	0	51	S	A
Cæſar Auguſt. Aragoniæ	41	45	14	15	1	21	A	S
Ceſena	43	40	34	40	0	1	S	A
Colmaria Alſatiæ	48	12	26	0	0	33	A	S
Colonia Agrippina	50	56	29	0	0	22	A	S
Complutum	41	0	18	35	1	4	A	S
Compoſtella Hiſpaniæ	42	30	10	30	1	36	A	S
Comum	44	40	29	56	0	17	A	S
Concordia	44	55	33	15	0	4	A	S
Confluentia	50	25	27	30	0	26	A	S
Conimbria Luſitaniæ	40	0	11	0	1	34	A	S
Conſtant. Heluet. in Conſin.	47	30	32	30	0	8	A	S
Conſtantinopolis	43	5	55	30	1	24	S	A
Corduba Hiſpaniæ	38	0	14	45	1	19	A	S
Corfinium *Corfu*	38	45	45	10	0	43	S	A
Corſicæ Inſulæ Medium	40	50	31	0	0	14	A	[illegible]
Cortona Hætruriæ	42	40	35	0	0	2	S	A
Coſentia Calabriæ	40	15	43	12	0	35	S	A
Cracouia Poloniæ	50	12	46	0	0	46	S	A
Crema	44	20	31	15	0	13	A	S
Cremona (na	44	15	33	30	0	4	A	S
Cuma, vndè Sybilla Cuma-	41	30	41	0	0	26	S	A
Dantiſcum Pruſiæ	54	44	44	15	0	39	S	A
Derthona Italiæ *Tortona*	44	0	30	40	0	15	A	S
Domus Lauretana	43	0	37	0	0	10	S	S
Drepanum Siciliæ *Trapani*	36	20	37	0	0	10	S	A
Dreſda Miſniæ	51	0	23	45	0	43	A	A

Dul-

Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo		Longitudo		Differentia temporis		In mot. Plan.	In Aſpectibus
	G	l	G	l	H	l		
Dulcignum	43	0	43	30	0	36	S	A
Dyrrhacium Macedoniæ	40	50	45	0	0	42	S	A
Edemburgum	51	26	37	15	0	11	S	A
Eiſlebia	51	46	32	30	0	8	A	S
Elbinga	53	55	45	10	0	43	S	A
Embda Friſiæ	53	30	29	0	0	22	A	S
Epheſus Metrop. Ioniæ	37	40	57	40	1	33	S	A
Erfordia Turingiæ	51	7	34	40	0	1	S	A
Eſlinga Imperialis	48	35	30	0	0	18	A	S
Eugubium Italiæ	43	7	36	30	0	8	S	A
Fabrianum	43	7	36	30	0	8	S	A
Fanum	43	40	35	40	0	5	S	A
Fauentia	43	30	35	20	0	3	S	A
Ferraria	44	18	36	0	0	6	S	A
Finis terræ	44	2	4	23	2	0	A	S
Firmum	43	9	37	10	0	11	S	A
Flandria	52	30	22	0	0	47	A	S
Florentia Hetruriæ	43	27	35	30	0	5	S	A
Forum Cornelij *Imola*	43	30	34	0	0	1	S	A
Forum Iulij Hiſtriæ *Friuli*	45	10	35	15	0	3	S	A
Forum Liuij. *Forlì*	43	40	34	30	0	0		
Forum Flaminij. *Foligno*	42	40	36	0	0	0	S	A
Forũ Sempronij. *Foſſombruno*	43	30	34	50	0	1	S	A
Francf. ad Menum Ger. Emp.	50	4	30	30	0	16	A	S
Francfordia ad Oderam	52	30	39	30	0	20	S	A
Freiberga	50	52	37	50	0	13	S	A
Frigurgum Heluetię	47	45	28	12	0	25	A	S
Friburgum Miſnię	50	58	30	40	0	15	A	S

Catalogus Ciuitatum pro babenda differentia Meridianorum.

Nomina Ciuitatum, & locorum	Latitudo		Longit.		Differētia temporis		In mot. Plan.	In Aſpectibus
	G	l	G	l	H	l		
Friburgum Rhetię Briſgeæ	48	13	28	0	0	26	A	S
Gaieta	40	50	38	50	0	17	S	A
Gallip. vel Callio polis	41	30	45	10	0	43	S	A
Gandauum Flandrię	51	15	25	30	0	36	A	S
Geneua Sabaudiæ	45	25	28	30	0	24	A	S
Genua Italię	44	27	31	0	0	14	A	S
Ghelderem, aut Geldria	52	20	27	40	0	27	A	S
Geppinga	49	37	30	0	0	18	A	S
Goeſa Zelandię	51	30	25	30	0	36	A	S
Gorlicium Sleſię	51	9	39	35	0	20	S	A
Grætium	47	22	40	0	0	22	S	A
Granata Hiſpanię	37	30	17	30	1	8	A	S
Grauina	41	15	43	10	0	35	S	A
Gremberg.	51	50	40	0	0	22	S	A
Hadrianopolis Bulgarię	42	45	52	30	1	12	S	A
Haphnia Danię	55	43	36	45	0	9	S	A
Hamburgum Holſatię	53	44	31	30	0	12	A	S
Halberſtadium Saxonię	52	0	35	20	0	3	S	A
Harlemum Hollandię	52	25	26	45	0	31	A	S
Herbipolis Franconiæ	49	58	30	30	0	16	A	S
Heidelberga	49	20	32	0	0	11	A	S
Hiſpalis. *Seuilla.*	37	25	14	15	1	21	A	S
Hydruntum. *Otranto.*	41	26	45	20	0	43	S	A
Ingolſtadium Bauariæ	48	38	34	30	0	0		
Inpons. *Iſpruch.*	46	55	33	45	0	3	A	S
Inter amna. *Terni.*	42	36	37	30	0	12	S	A

Catalogus Ciuitatum pro babenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo		Longit.		Differētia temporis		In mot. Plan.	In Aſpectibus.
	G	I	G	I	H	I		
Iuliacum. *Eulich.*	52	0	27	30	0	28	A	S
Kanzanum	47	40	35	30	0	4	S	A
Laodicea Rhamata	39	40	68	30	2	16	S	A
Lemnos Inſula	41	0	52	30	1	12	S	A
Leoburgum Saxoniæ	54	10	28	2	0	26	A	S
Leoburgum Ruthenię Lee-(polis	50	33	40	45	0	25	S	A
Leodium	50	51	28	0	0	26	A	S
Legio Caſtillię Hiſp.	42	15	21	10	0	53	A	S
Lerida Catalonię	41	20	28.	30	0	24	A	S
Liburnus. *Liuorno.*	42	10	34	30	0	0		
Lipſia Miſnię	51	17	35	0	0	2	S	A
Londinum. *Londra*	51	32	20	30	0	56	A	S
Louanium Brabanti	50	50	26	45	0	31	A	S
Lubecum Saxonię	53	57	34	50	0	1	S	A
Luca	42	40	32	40	0	7	A	S
Lucerna Heluetię	46	50	30	30	0	16	A	S
Lugdunum Gallię. *Lion*	45	40	24	0	0	42	A	S
Lugdunum Batauię	52	7	27	30	0	28	A	S
Lundum Scanię	55	45	37	50	0	13	S	A
Luneburgum	54	40	34	20	0	1	A	S
Lutetię Pariſiorum	48	30	24	0	0	42	A	S
Lysbona Portugallię	39	38	9	10	0	41	A	S
Macerata in Piceno	43	0	37	0	0	10	S	A
Madritum Hiſpanię	40	45	22	30	0	48	A	S
Magdeburgum Saxonię	52	10	35	15	0	3	S	A
Maguntia Imperialis	50	0	30	0	0	18	A	S
Maioricę Inſula Mallorca	39	35	18	25	1	4	A	S
Manfredonium Sipontus	40	45	42	50	0	33	S	A

Manſ-

Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo		Longit.		Differẽtia temporis		In mot. Plan.	In Aſpe-ctibus
	G	l	H	l	H	l		
Mansfeldum	51	40	35	0	0	2	S	A
Mantua	44	35	34	30	0	0		
Marpurgum Haſſiæ	50	43	32	35	0	8	A	S
Marſilia	42	30	26	0	0	34	A	S
Medina Cœli	41	10	23	30	0	44	A	S
Mediòlanum	44	50	30	30	0	16	A	S
Meldeburg	51	31	26	0	0	34	A	S
Meſſana Siciliæ	29	0	42	45	0	33	S	A
Metis Lotaringiæ	49	12	27	30	0	28	A	S
Minoricæ Inſula	40	10	19	30	1	0	A	S
Miſnia	51	9	37	45	0	13	A	S
Monachium Bauaris	48	0	32	45	0	7	S	A
Monaſterium. *Munſter*	51	54	31	10	0	13	A	S
Mons Peſſulanus *Mompelier*	42	50	25	0	0	38	A	S
Monsregius Boruſſiæ	54	20	46	30	0	48	S	A
Mons regius Franconię	50	16	31	0	0	14	A	S
Mutina	44	38	33	56	0	2	A	S
Nannetum Britaniæ minorij	40	12	16	20	1	13	A	S
Narbona	41	50	23	0	0	38	A	S
Naſſauia	48	16	31	20	0	13	A	S
Neapolis Auſtriæ. *Neuſtat.*	47	54	38	0	0	14	S	A
Neapolis Italiæ	41	0	40	0	0	22	S	A
Nebia Corſicæ	40	40	27	30	0	28	A	S
Nemurs	50	30	24	20	0	41	A	S
Neoburgum Danubij	48	42	31	45	0	11	A	S
Neoburgum Turingiæ	51	20	32	0	0	10	A	S
Nicea, vbi Conc. celebr.	41	40	57	0	1	30	S	A

Nigro-

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Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo		Longit.		Differẽtia temporis		In mot. Plan.	In Aſpe-ɋ̃.bus
	G	l	G	l	H	l		
Nigroponti Inſula	38	15	53	40	1	17	S	A
Niuernum	45	0	19	0	1	2	A	S
Nola	40	45	40	15	0	23	S	A
Norimberga Imperialis	49	24	34	0	0	2	A	S
Nouaria	44	30	30	30	0	16	A	S
Nurſia. *Norcia.*	42	44	37	0	0	10	S	A
Odenſee Daniæ	55	21	34	15	0	1	A	S
Onolſpachium	49	33	32	0	0	10	A	S
Ortonum	43	15	40	42	0	25	S	A
Oſſemburgum	52	17	31	35	0	12	A	S
Oſtenda Flandriæ	51	20	24	15	0	41	A	S
Ottinga inferioris Sueuiæ	48	58	28	3	0	26	A	S
Palleanum	41	54	39	0	0	18	S	A
Pampellon Hiſpaniæ	42	50	15	0	1	18	A	S
Panormum Siciliæ	37	30	38	0	0	14	S	A
Papia Italiæ	44	20	31	0	0	14	A	S
Parma Italiæ	43	30	32	30	0	8	A	S
Patauium Bauariæ	48	28	34	0	0	2	A	S
Patauium Italiæ	45	10	35	0	0	2	S	A
Paternianum Paſtr. Hiſp.	40	45	9	50	1	39	A	S
Perpignanum Galliæ	42	40	18	30	1	4	A	S
Peruſia	42	56	36	50	0	9	S	A
Piſæ Hetrariæ	43	6	35	30	0	4	S	A
Piſaurum. *Peſaro.*	43	51	36	30	0	8	S	A
Piſtorium. *Piſtoia.*	43	10	33	20	0	5	A	S
Placentia	44	0	31	50	0	11	A	S
Praga Bohæmiæ	50	6	36	30	0	8	S	A

Pola.

Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo		Longit.		Differẽtia temporis		In mot. Plan.	In Aſpectibus
	G	l	G	l	H	l		
Sibinicum Dalmatiæ	44	20	38	42	0	17	S	A
Siracuſę Siciliæ	37	15	41	30	0	28	S	A
Spira Imperialis	49	20	30	40	0	15	A	S
Spoletum	43	15	38	30	0	16	S	A
Stetinum Pomeraniæ	54	0	37	45	0	13	S	A
Strigonium Vngariæ	47	30	41	45	0	29	S	A
Sueſſa Italiæ. *Seſſa.*	41	30	40	30	0	24	S	A
Sulmona Ital. vbi Ouid.	42	20	41	30	0	28	S	A
Tarẹntum *Taranto.*	41	15	43	15	0	35	S	A
Taruiſium Italiæ	45	30	35	30	0	4	S	A
Taurinum Penemontij	44	40	29	30	0	16	A	S
Tergeſtum Colon. *Trieſt.*	45	20	35	15	0	3	S	A
Tholoſa Galliæ	43	30	20	0	0	58	A	S
Tibur Italiæ. *Tiuoli.*	42	0	39	0	0	18	S	A
Tigurum Heluetiæ	46	48	26	36	0	32	A	S
Tolentinum Italiæ	43	6	36	40	0	9	S	A
Toletum Hiſpaniæ	40	0	16	0	1	14	A	S
Traiectum Islandiæ	52	16	27	34	0	28	A	S
Treueris	49	55	27	45	0	27	A	S
Tridentum. *Trento.*	45	20	31	42	0	11	A	S
Trutauia Franconiæ.	49	46	28	18	0	25	A	S
Tubinga. *Vuirtemberg.*	48	38	29	45	0	19	A	S
Turonia Galliæ. *Taurs.*	47	20	19	45	0	59	A	S
Valentia Hiſpaniæ	39	40	20	0	0	58	A	S
Vallis Olet. *Valladolit*	42	20	9	0	1	42	A	S
Varadium Vngariæ	48	3	46	45	0	49	S	A
Velitrum. *Veletri.*	41	50	36	30	0	8	S	A
Venetiæ	45	20	35	0	0	2	S	A

Ver-

Catalogus Ciuitatum pro habenda differentia Meridianorum.

Nomina Ciuitatum, & locorum.	Latitudo		Longit.		Differētia temporis		In mot. Plan.	In Aſpe-ctibus.
	G	l	G	l	H	l		
Vercellæ	44	10	29	50	0	19	A	S
Verona	44	50	34	0	0	2	A	S
Verona Heluetiæ. *Berna.*	46	25	27	30	0	28	A	S
Vicentia	44	30	33	0	0	6	A	S
Vienna Auſtriæ	48	25	40	0	0	22	S	A
Vienna Galliæ	45	12	22	30	0	48	A	S
Viterbum	42	15	39	0	0	18	S	A
Vilna Lithuaniæ	54	30	53	15	1	14	S	A
Vlma inferioris Sueuiæ	48	25	30	30	0	16	A	S
Volaterra Ital. *Volterra.*	42	40	33	50	0	3	A	S
Vratiſlauia Sleſiæ	51	10	39	0	0	18	S	A
Vrbinum Italiæ	43	0	35	20	0	3	S	A
Vtinum Vdene	46	30	36	0	0	6	S	A
Vuitemberba Saxoniæ	51	54	35	45	0	5	S	A
Vuormatia Imperialis	49	44	28	30	0	24	A	S

Quas

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Quas corporis partes Planetæ in ſignis Zodiaci reſpiciant.

	♄	♃	♂	☉	♀	☿	☽
♈	Pectus	Ventrē	Caput	Femora	Pedes	Crura	Genua
♉	Ventrē	Dorsū	Collum	Genua	Caput	Pedes	Crura
♊	Ventrē	Verēda	Pectus	Crura Talos	Collum	Caput	Femora
♋	Virilia	Femora	Pectus	Pedes	Brachia Humer.	Oculos	Caput
♌	Verēda	Femora Genua	Ventrē	Caput	Cor	Guttur	Collū
♍	Pedes	Genua	Ventrē	Collum	Ventrē	Cor	Humer.
♎	Genua	Oculos	Verēda	Humer.	Caput	Ventrē	Cor
♏	Talos	Pedes	Caput Brachia	Cor	Verēda	Dorsū	Ventrē
♐	Pedes	Crura	Manus	Ventrē	Femora	Verēda	Dorsū
♑	Caput Oculos	Crura	Dorsū	Cor	Verēda	Femora	Femora
♒	Collum	Pectus	Cor	Verēda	Genua	Femora	Verēda
♓	Humeros	Cor	Ventrē	Femora	Dorsū	Crura	Femora

Eleuatio gr. 38							39												40. Poli.
Gradus loci	Semidiurna						Semidiurna						Semidiurna						Gradus loci
	♈		♉		♊		♈		♉		♊		♈		♉		♊		
	Seminocturna						Seminocturna						Seminocturna						
☼	♎		♏		♐		♎		♏		♐		♎		♏		♐		☼
	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	
0	6	0	6	37	7	7	6	0	6	38	7	9	6	0	6	39	7	12	30
1	6	1	6	38	7	8	6	1	6	39	7	10	6	1	6	40	7	13	29
2	6	3	6	39	7	8	6	3	6	40	7	11	6	3	6	42	7	13	28
3	6	4	6	40	7	9	6	4	6	41	7	12	6	4	6	43	7	14	27
4	6	5	6	41	7	10	6	5	6	42	7	13	6	5	6	44	7	15	26
5	6	7	6	42	7	10	6	7	6	44	7	13	6	7	6	46	7	16	25
6	6	8	6	43	7	11	6	8	6	45	7	14	6	8	6	47	7	17	24
7	6	9	6	44	7	12	6	9	6	46	7	15	6	9	6	48	7	18	23
8	6	10	6	46	7	12	6	11	6	47	7	15	6	11	6	50	7	18	22
9	6	11	6	47	7	13	6	12	6	48	7	16	6	12	6	51	7	19	21
10	6	12	6	48	7	14	6	13	6	49	7	15	6	13	6	52	7	19	20
11	6	14	6	49	7	15	6	14	6	51	7	17	6	15	6	53	7	20	19
12	6	15	6	50	7	15	6	15	6	52	7	17	6	16	6	54	7	20	18
13	6	16	6	51	7	15	6	16	6	53	7	18	6	17	6	55	7	21	17
14	6	18	6	52	7	16	6	18	6	54	7	18	6	19	6	56	7	21	16
15	6	19	6	53	7	16	6	19	6	55	7	19	6	20	6	57	7	22	15
16	6	20	6	54	7	16	6	20	6	56	7	19	6	21	6	58	7	22	14
17	6	21	6	55	7	17	6	22	6	57	7	20	6	23	6	59	7	23	13
18	6	22	6	56	7	17	6	23	6	58	7	20	6	24	7	0	7	23	12
19	6	23	6	57	7	17	6	24	6	59	7	20	6	25	7	1	7	24	11
20	6	25	6	58	7	18	6	26	7	0	7	20	6	27	7	2	7	24	10
21	6	26	6	59	7	18	6	27	7	1	7	21	6	28	7	3	7	24	9
22	6	27	7	0	7	18	6	28	7	2	7	21	6	29	7	4	7	24	8
23	6	29	7	1	7	19	6	30	7	3	6	21	6	31	7	5	7	25	7
24	6	30	7	2	7	19	6	31	7	4	7	22	6	32	7	6	7	25	6
25	6	31	7	3	7	19	6	32	7	5	7	22	6	33	7	7	7	25	5
26	6	32	7	3	7	19	6	33	7	6	[illegible]	22	6	35	7	8	7	25	4
27	6	33	7	4	7	19	6	34	7	7	7	22	6	36	7	9	7	25	3
28	6	34	7	5	7	19	6	35	7	8	7	22	6	37	7	10	7	25	2
29	6	36	7	6	7	19	6	37	7	8	7	22	6	38	7	11	7	26	1
30	6	37	7	7	7	19	6	38	7	9	7	22	6	39	7	12	7	26	0
Defcendentes.	♍		♌		♋		♍		♌		♋		♍		♌		♋		Afcendentes
	Semidiurna						Semidiurna						Semidiurna						
	♓		♒		♑		♓		♒		♑		♓		♒		♑		
	Seminocturna						Seminocturna						Seminocturna						

Eleuatio

Eleuatio gr. 41							42						43						Poli.
Gradus loci	Semidiurna						Semidiurna						Semidiurna						Gradus loci
	♈		♉		♊		♈		♉		♊		♈		♉		♊		
	Seminocturna						Seminocturna						Seminocturna						
☼	♎		♏		♐		♎		♏		♐		♎		♏		♐		☼
	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	
0	6	0	6	41	7	15	6	0	6	42	7	17	6	0	6	44	7	20	30
1	6	1	6	42	7	16	6	1	6	43	7	18	6	1	6	45	7	21	29
2	6	3	6	44	7	17	6	2	6	45	7	19	6	3	6	47	7	22	28
3	6	4	6	45	7	17	6	4	6	46	7	20	6	4	6	48	7	23	27
4	6	5	6	46	7	18	6	6	6	47	7	21	6	6	6	49	7	24	26
5	6	7	6	47	7	19	6	8	6	49	7	22	6	8	6	51	7	25	25
6	6	8	6	48	7	19	6	9	6	50	7	23	6	9	6	52	7	26	24
7	6	9	6	49	7	20	5	10	6	51	7	24	6	10	6	53	7	27	23
8	6	11	6	51	7	21	6	12	6	53	7	24	6	12	6	55	7	27	22
9	6	12	6	52	7	21	6	13	6	54	7	25	6	13	6	56	7	28	21
10	6	14	6	53	7	22	6	14	6	55	7	26	6	15	6	57	7	29	20
11	6	15	6	55	7	23	6	16	6	57	7	26	6	17	6	59	7	29	19
12	6	17	6	56	7	23	6	17	6	58	7	27	6	18	7	0	7	30	18
13	6	18	6	57	7	24	6	18	6	59	7	27	6	19	7	1	7	31	17
14	6	20	6	58	7	24	6	20	7	0	7	28	6	21	7	3	7	31	16
15	6	21	6	59	7	25	6	21	7	1	7	28	6	22	7	4	7	32	15
16	6	22	7	0	7	25	6	23	7	2	7	29	6	24	7	5	7	32	14
16	6	24	7	2	7	26	6	25	7	4	7	29	6	26	7	6	7	32	13
18	6	25	7	3	7	26	6	26	7	5	7	30	6	27	7	7	7	33	12
19	6	26	7	4	7	26	6	27	7	6	7	30	6	28	7	8	7	33	11
20	6	28	7	5	7	27	6	29	7	7	7	30	6	30	7	10	7	33	10
21	6	29	7	6	7	27	6	30	7	8	7	31	6	31	7	11	7	34	9
22	6	30	7	7	7	27	6	31	7	9	7	31	6	32	7	12	7	34	8
23	6	32	7	8	7	28	6	33	7	10	7	31	6	34	7	13	7	34	7
24	6	33	7	9	7	28	6	34	7	11	7	32	6	35	7	14	7	35	6
25	6	34	7	10	7	28	6	35	7	13	7	32	6	37	7	15	7	35	5
26	6	36	7	11	7	29	6	37	7	14	7	32	6	39	7	16	7	35	4
27	6	37	7	12	7	29	6	38	7	15	7	32	6	40	7	17	7	35	3
28	6	38	7	13	7	29	6	39	7	16	7	32	6	41	7	18	7	35	2
29	6	40	7	14	7	30	6	41	7	16	7	32	6	43	7	19	7	36	1
30	6	41	7	15	7	30	6	42	7	17	7	32	6	44	7	20	7	36	0
Descendentes	♍		♌		♋		♍		♌		♋		♍		♌		♋		Ascendentes.
	Semidiurna						Semidiurna						Semidiurna						
	♓		♒		♑		♓		♒		♑		♓		♒		♑		
	Seminocturna						Seminocturna						Seminocturna						

Eleuatio gr. 44.							45									46.	Poli.		
Gradus loci	Semidiurna						Semidiurna						Semidiurna						Gradus loci
	♈		♉		♊		♈		♉		♊		♈		♉		♊		
	Seminocturna						Seminocturna						Seminocturna						
☼	♎		♏		♐		♎		♏		♐		♎		♏		♐		☼
	H	l	H	l	H	l	H	l	H	l	H	l	H	l	H	l	H	l	
0	6	0	6	45	7	23	6	0	6	47	7	26	6	0	6	49	7	30	30
1	6	2	6	47	7	24	6	2	6	48	7	27	6	2	6	50	7	31	29
2	6	4	6	48	7	25	6	3	6	50	7	28	6	3	6	52	7	32	28
3	6	5	6	50	7	26	6	5	6	51	7	29	6	5	6	53	7	33	27
4	6	6	6	51	7	27	6	7	6	53	7	30	6	7	6	54	7	34	26
5	6	8	6	53	7	28	6	8	6	54	7	31	6	8	6	56	7	35	25
6	6	9	6	54	7	29	6	10	6	56	7	32	6	10	6	57	7	36	24
7	6	11	6	55	7	30	6	11	6	57	7	33	6	1	6	59	7	37	23
8	6	13	6	57	7	30	6	13	6	59	7	34	6	13	7	0	7	37	22
9	6	14	6	58	7	31	6	14	7	0	7	35	6	15	7	2	7	38	21
10	6	15	6	59	7	52	6	16	7	1	7	36	6	17	7	4	7	39	20
11	6	17	7	1	7	32	6	17	7	3	7	36	6	18	7	5	7	39	19
12	6	18	7	2	7	33	6	19	7	4	7	37	6	20	7	7	7	40	18
13	6	20	7	3	7	34	6	21	7	5	7	38	6	22	7	8	7	41	17
14	6	22	7	5	7	34	6	22	7	7	7	38	6	23	7	10	7	41	16
15	6	23	7	6	7	35	6	24	7	8	7	39	6	25	7	11	7	42	15
16	6	2.	7	7	7	36	6	26	7	9	7	39	6	27	7	12	7	43	14
17	6	26	7	9	7	36	6	27	7	11	7	40	6	28	7	14	7	43	13
18	6	27	7	10	7	37	6	29	7	12	7	40	6	30	7	15	7	44	12
19	6	29	7	11	7	37	6	30	7	13	7	41	6	31	7	16	7	44	11
20	6	30	7	12	7	37	6	32	7	15	7	41	6	33	7	18	7	45	10
21	6	32	7	13	7	38	6	33	7	16	7	41	6	34	7	19	7	45	9
22	6	33	7	14	7	38	6	35	7	17	7	42	6	36	7	20	7	45	8
23	6	35	7	16	7	38	6	36	7	19	7	42	6	37	7	22	7	46	7
24	6	36	7	17	7	39	6	38	7	20	7	42	6	39	7	23	7	46	6
25	6	38	7	18	7	39	6	40	7	21	7	42	6	41	7	24	7	46	5
26	6	39	7	19	7	39	6	41	7	22	7	42	6	42	7	25	7	46	4
27	6	41	7	20	7	39	6	43	7	23	7	43	6	44	7	26	7	47	3
28	6	42	7	21	7	39	6	44	7	24	7	43	6	46	7	27	7	47	2
29	6	44	7	22	7	39	6	46	7	25	7	43	6	47	7	29	7	47	1
30	6	45	7	23	7	39	6	47	7	26	7	43	6	49	7	30	7	47	0
Deſcendentes	♍		♌		♋		♍		♌		♋		♍		♌		♋		Aſcendentes
	Semidiurna						Semidiurna						Semidiurna						
	♓		♒		♑		♓		♒		♑		♓		♒		♑		
	Seminocturna						Seminocturna						Seminocturna						

Ele-

Eleuatio gr. 47.							48						49						Poli
Gradus loci	Semidiurna						Semidiurna						Semidiurna						Gradus loci
	♈		♉		♊		♈		♉		♊		♈		♉		♊		
	Seminocturna						Seminocturna						Seminocturna						
☼	♎		♏		♐		♎		♏		♐		♎		♏		♐		☼
	H	'	H	'	H	'	H	'	H	'	H	'	H	'	H	'	H	'	
0	6	0	6	50	7	33	6	0	6	52	7	36	6	0	6	54	7	40	30
1	6	2	6	52	7	34	6	2	6	54	7	37	6	2	6	56	7	41	29
2	6	3	6	53	7	35	6	4	6	55	7	39	6	4	6	57	7	43	28
3	6	5	6	55	7	36	6	6	6	57	7	40	6	6	6	59	7	44	27
4	6	7	6	57	7	37	6	8	6	59	7	41	6	8	7	1	7	45	26
5	6	8	6	58	7	38	6	9	7	0	7	42	6	9	7	2	7	46	25
6	6	10	7	0	7	39	6	11	7	2	7	43	6	11	7	4	7	47	24
7	6	12	7	2	7	40	6	13	7	4	7	44	6	13	7	6	7	48	23
8	6	13	7	3	7	41	6	14	7	5	7	45	6	14	7	7	7	49	22
9	6	15	7	5	7	42	6	16	7	7	7	46	6	16	7	9	7	50	21
10	6	17	7	6	7	43	6	18	7	9	7	47	6	18	7	11	7	51	20
11	6	18	7	8	7	43	6	19	7	10	7	47	6	20	7	13	7	52	19
12	6	20	7	9	7	44	6	21	7	12	7	48	6	22	7	15	7	53	18
13	6	22	7	10	7	45	6	23	7	14	7	49	6	24	7	16	7	54	17
14	6	24	7	12	7	45	6	24	7	15	7	49	6	25	7	18	7	54	16
15	6	26	7	13	7	46	6	26	7	17	7	50	6	27	7	19	7	55	15
16	6	28	7	15	7	47	6	28	7	18	7	51	6	29	7	21	7	56	14
17	6	29	7	16	7	47	6	30	7	20	7	51	6	31	7	23	7	56	13
18	6	31	7	18	7	48	6	32	7	21	7	52	6	33	7	24	7	57	12
19	6	33	7	19	7	48	6	34	7	22	7	53	6	35	7	25	7	57	11
20	6	34	7	21	7	48	6	35	7	24	7	53	6	36	7	27	7	58	10
21	6	36	7	22	7	49	6	37	7	25	7	54	6	38	7	28	7	58	9
22	6	38	7	23	7	49	6	39	7	26	7	54	6	40	7	29	7	58	8
23	6	39	7	25	7	49	6	40	7	28	7	54	6	42	7	31	7	59	7
24	6	41	7	26	7	50	6	42	7	29	7	55	6	44	7	32	7	59	6
25	6	43	7	27	7	50	6	44	7	30	7	55	6	46	7	33	7	59	5
26	6	44	7	28	7	50	6	45	7	32	7	55	6	47	7	35	8	0	4
27	6	46	7	29	7	51	6	47	7	33	7	56	6	49	7	36	8	0	3
28	6	47	7	30	7	51	6	49	7	34	7	56	6	51	7	37	8	0	2
29	6	49	7	32	7	51	6	50	7	35	7	56	6	52	7	39	8	0	1
30	6	50	7	33	7	51	6	52	7	36	7	56	6	54	7	40	8	0	0
Deſcendentes	♍		♌		♋		♍		♌		♋		♍		♌		♋		Aſcendentes
	Semidiurna						Semidiurna						Semidiurna						
	♓		♒		♑		♓		♒		♑		♓		♒		♑		
	Seminocturna						Seminocturna						Seminocturna						

Ele-

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Eleuatio gr. 50							51							52						Poli
Gradus loci	Semidiurna						Semidiurna						Semidiurna							Gradus loci
	♈		♉		♊		♈		♉		♊		♈		♉		♊		
	Seminocturna						Seminocturna						Seminocturna						
☉	♎		♏		♐		♎		♏		♐		♎		♏		♐		☉
	H	'	H	'	H	'	H	'	H	'	H	'	H	'	H	'	H	'	
0	6	0	6	56	7	44	6	0	6	58	7	48	6	0	7	0	7	52	30
1	6	2	6	58	7	45	6	2	7	0	7	49	6	2	7	2	7	54	29
2	6	4	6	59	7	47	6	4	7	2	7	51	6	4	7	4	7	55	28
3	6	6	7	1	7	48	6	6	7	4	7	52	6	6	7	6	7	56	27
4	6	8	7	3	7	49	6	8	7	0	7	53	6	8	7	8	7	58	26
5	6	9	7	5	7	50	6	10	7	7	7	55	6	10	7	10	7	59	25
6	6	11	7	7	7	51	6	12	7	9	7	56	6	12	7	12	8	0	24
7	6	13	7	9	7	52	6	14	7	11	7	57	6	14	7	14	8	1	23
8	6	15	7	10	7	53	6	16	7	13	7	58	6	16	7	16	8	3	22
9	6	17	7	12	7	54	6	18	7	15	7	59	6	18	7	17	8	4	21
10	6	19	7	14	7	55	6	20	7	17	8	0	6	20	7	19	8	5	20
11	6	21	7	15	7	56	6	22	7	18	8	1	6	22	7	21	8	6	19
12	6	23	7	17	7	57	6	24	7	20	8	2	6	24	7	23	8	7	18
13	6	25	7	19	7	58	6	26	7	22	8	3	6	27	7	25	8	7	17
14	6	26	7	20	7	58	6	27	7	23	8	3	6	29	7	29	8	8	16
15	6	28	7	22	7	59	6	29	7	25	8	4	6	31	7	28	8	9	15
16	6	30	7	24	8	0	6	31	7	27	8	5	6	33	7	30	8	10	14
17	6	32	7	25	8	0	6	33	7	28	8	5	6	35	7	32	8	11	13
18	6	34	7	27	8	1	6	35	7	30	8	6	6	37	7	34	8	11	12
19	6	36	7	28	8	2	6	37	7	32	8	7	6	39	7	35	8	12	11
20	6	38	7	30	8	2	6	39	7	33	8	7	6	41	7	37	8	13	10
21	6	40	7	31	8	3	6	41	7	35	8	8	6	43	7	39	8	13	9
22	6	42	7	33	8	3	6	43	7	36	8	8	6	45	7	40	8	13	8
23	6	43	7	34	8	4	6	45	7	58	8	8	6	47	7	42	8	14	7
24	6	45	7	36	8	4	6	47	7	39	8	9	6	49	7	43	8	14	6
25	6	47	7	37	8	4	6	49	7	41	8	9	6	51	7	45	8	14	5
26	6	49	7	39	8	4	6	51	7	42	8	9	6	53	7	47	8	15	4
27	6	51	7	40	8	4	6	53	7	44	8	10	6	55	7	48	8	15	3
28	6	53	7	41	8	4	6	55	7	45	8	10	6	57	7	50	8	15	2
29	6	54	7	43	8	5	6	56	7	47	8	10	6	58	7	51	8	15	1
30	6	56	7	44	8	5	6	58	7	48	8	10	7	0	7	52	8	15	0
Deſcendentes.	♍		♌		♋		♍		♌		♋		♍		♌		♋		Aſcendentes.
	Semidiurna						Semidiurna						Semidiurna						
	♓		♒		♑		♓		♒		♑		♓		♒		♑		
	Seminocturna						Seminocturna						Seminocturna						

Ele-

Gradus loci ☉	Eleuatio gr. 53.						54						55						Poli. Gradus loci ☉
	Semidiurna						Semidiurna						Semidiurna						
	♈		♉		♊		♈		♉		♊		♈		♉		♊		
	Seminocturna						Seminocturna						Seminocturna						
	♎		♏		♐		♎		♏		♐		♎		♏		♐		
	H	'	H	'	H	'	H	'	H	'	H	'	H	'	H	'	H	'	
0	6	0	7	3	7	57	6	0	7	5	8	2	6	0	7	8	8	8	30
1	6	2	7	5	7	58	6	2	7	7	8	3	6	2	7	01	8	9	29
2	6	4	7	7	8	0	6	4	7	9	8	5	6	5	7	12	8	10	28
3	6	6	7	9	8	1	6	7	7	11	8	6	6	7	7	14	8	12	27
4	6	8	7	11	8	2	6	9	7	13	8	7	6	9	7	16	8	13	26
5	6	11	7	13	8	4	6	11	7	15	8	9	6	12	7	19	8	15	25
6	6	13	7	15	8	5	6	13	7	17	8	10	6	14	7	21	8	16	24
7	6	15	7	17	8	7	6	15	7	19	8	11	6	16	7	23	8	17	23
8	6	17	7	18	8	8	6	18	7	22	8	13	6	18	7	25	8	19	22
9	6	19	7	20	8	9	6	20	7	24	8	14	6	20	7	27	8	20	21
10	6	21	7	22	8	10	6	22	7	29	8	15	6	22	7	29	8	21	20
11	6	23	7	24	8	11	6	24	7	28	8	16	6	25	7	21	8	22	19
12	6	25	7	26	8	12	6	26	7	30	8	17	6	27	7	33	8	23	18
13	6	27	7	28	8	13	6	28	7	32	8	18	6	29	7	35	8	24	17
14	6	30	7	30	8	14	6	31	7	33	8	19	6	32	7	37	8	25	16
15	6	32	7	32	7	15	6	33	7	35	8	20	6	34	7	39	8	26	15
16	6	34	7	44	8	16	6	35	7	37	8	21	6	36	7	41	8	27	14
17	6	36	7	35	8	17	6	37	7	39	8	22	6	39	7	43	8	28	13
18	6	38	7	37	8	17	6	39	7	41	8	23	6	41	7	45	8	29	12
19	6	40	7	39	8	18	6	41	7	43	8	24	6	43	7	47	8	30	11
20	6	42	7	40	8	19	6	44	7	45	8	25	6	46	7	49	8	30	10
21	6	44	7	42	8	19	6	46	7	47	8	25	6	48	7	51	8	31	9
22	6	46	7	44	8	19	6	48	7	49	8	25	6	50	7	53	8	31	8
23	6	48	7	46	8	20	6	50	7	50	8	26	6	52	7	54	8	32	7
24	6	50	7	48	8	20	6	52	7	52	8	26	6	54	7	56	8	32	6
25	6	52	7	49	8	20	6	54	7	54	8	26	6	56	7	58	8	32	5
26	6	55	7	51	8	21	6	57	7	55	8	27	6	59	8	0	8	33	4
27	6	57	7	52	8	21	6	59	7	57	8	27	7	1	8	2	8	33	3
28	6	59	7	54	8	21	7	1	7	59	8	27	7	3	8	4	8	33	2
29	7	1	7	55	8	22	7	8	8	0	8	27	7	6	8	5	8	34	1
30	7	3	7	57	8	22	7	5	8	2	8	27	7	8	8	7	8	34	0
Deſcendentes.	♍		♌		♋		♍		♌		♋		♍		♌		♋		Aſcendentes.
	Semidiurna						Semidiurna						Semidiurna						
	♓		♒		♑		♓		♒		♑		♓		♒		♑		
	Seminocturna						Seminocturna						Seminocturna						

Ele-

Tabula arcus Semidiurni, & Seminocturni ad eleuationem poli grad. 44. min. 29.

Grad. loci ☉	Semidiurna ♈		Semidiurna ♉		Semidiurna ♊		Grad. loci ☉
	Seminocturna ♎		Seminocturna ♏		Seminocturna ♐		
gr.	H	'	H	'	H	'	gr.
0	6	0	6	46	7	25	30
1	6	2	6	48	7	26	29
2	6	3	6	49	7	27	28
3	6	5	6	51	7	28	27
4	6	6	6	52	7	29	26
5	6	8	6	53	7	30	25
6	6	9	[illegible]	55	7	30	24
7	6	11	6	56	7	31	23
8	6	12	6	58	7	32	22
9	6	14	6	59	7	33	21
10	6	16	7	0	7	34	20
11	6	17	7	2	7	34	19
12	6	19	7	3	7	35	18
13	6	20	7	4	7	36	17
14	6	22	7	6	7	36	16
15	6	23	7	7	7	37	15
16	6	25	7	8	7	37	14
17	6	26	7	10	7	38	13
18	6	28	7	11	7	38	12
19	6	29	7	12	7	39	11
20	6	31	7	13	7	39	10
21	6	32	7	15	7	40	9
22	6	34	7	16	7	40	8
23	6	36	7	17	7	40	7
24	6	37	7	18	7	40	6
25	6	39	7	89	7	41	5
26	6	40	7	21	7	41	4
27	6	42	7	22	7	41	3
28	6	43	7	23	7	41	2
29	6	45	7	24	7	41	1
30	6	46	7	25	7	41	0
Deſcendentes	Semidiurna ♍		Semidiurna ♌		Semidiurna ♋		Aſcendentes
	Seminocturna ♓		Seminocturna ♒		Seminocturna ♑		

Tabula conuertendi horas, & earum fractiones in proportionem Æquatoris.

Horæ dici	Gradus Æquat.
1	15
2	30
3	45
4	60
5	75
6	90
7	105
8	120
9	135
10	150
11	165
12	180
13	195
14	210
15	225
16	240
17	255
18	270
19	285
20	300
21	315
22	330
23	345
24	360

Horæ M.	Æquat. G.	Æquat. M.	Horæ M.	Æquat. G.	Æquat. M.
1	0	15	31	7	45
2	0	30	32	8	0
3	0	45	33	8	15
4	1	0	34	8	30
5	1	15	35	8	45
6	1	30	36	9	0
7	1	45	37	9	15
8	2	0	38	9	30
9	2	15	39	9	45
10	2	30	40	10	0
11	2	45	41	10	15
12	3	0	42	10	30
13	3	15	43	10	45
14	3	30	44	11	0
15	3	45	45	11	15
16	4	0	46	11	30
17	4	15	47	11	45
18	4	30	48	12	0
19	4	45	49	12	15
20	5	0	50	12	30
21	5	15	51	12	45
22	5	30	52	13	0
23	5	45	53	13	15
24	6	0	54	13	30
25	6	15	55	13	45
26	6	30	56	14	0
27	6	45	57	14	15
28	7	0	58	14	30
29	7	15	59	14	45
30	7	30	60	15	0
31	7	45			
M. S.	G. M.	M. S.	M. S.	G. M.	M. S.
T. Q.	S. T.	T. Q.	T. Q.	S. T.	T. Q.

Tabula Aequationis Dierum naturalium.

	A		S		S		A		A		A		S		S		S		S		A		A	
gr.	♈		♉		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓	
☼	'	''	'	''	'	''	'	''	'	''	'	''	'	''	'	''	'	''	'	''	'	''	'	''
0	7	45	1	11	4	3	0	58	5	43	2	9	7	44	15	34	13	25	0	59	11	48	14	36
1	7	26	1	35	4	0	1	14	5	45	1	53	8	5	15	42	13	7	0	27	12	4	14	29
2	7	7	1	37	3	16	1	29	5	46	1	37	8	25	15	48	12	48	0	5	12	19	14	21
3	6	48	1	49	3	51	1	42	5	47	1	21	8	45	15	53	12	29	0	A 35	12	34	14	13
4	6	29	2	1	3	46	1	54	5	48	1	5	9	5	15	57	12	10	1	4	12	50	14	4
5	6	10	2	12	3	39	2	7	5	48	0	48	9	25	16	1	11	50	1	33	13	5	13	55
6	5	51	2	23	3	32	2	19	5	48	0	31	9	44	16	5	11	30	2	3	13	19	13	46
7	5	31	2	33	3	25	2	32	5	46	0	S 14	10	3	16	7	11	10	2	32	13	32	13	37
8	5	11	2	43	3	17	2	44	5	44	0	10	10	22	16	8	10	49	3	1	13	44	13	27
9	4	51	2	53	3	9	2	56	5	40	0	27	10	41	16	9	10	28	3	29	13	55	13	17
10	4	31	3	3	3	0	3	8	5	36	0	45	11	0	16	9	10	6	3	57	14	5	13	7
11	4	11	3	13	2	51	3	20	5	31	1	3	11	19	16	9	9	42	4	25	14	14	12	56
12	3	52	3	22	2	41	3	32	5	25	1	21	11	38	16	8	9	16	4	53	14	22	12	44
13	3	53	3	30	2	31	3	43	5	19	1	40	11	57	16	7	8	50	5	20	14	29	12	32
14	3	14	3	37	2	21	3	54	5	13	1	59	12	16	16	5	8	24	5	48	14	35	12	19
15	2	55	3	43	2	10	4	4	5	6	2	19	12	34	16	1	7	58	6	16	14	40	12	6
16	2	37	3	48	2	0	4	14	4	58	2	40	12	51	15	56	7	31	6	43	14	45	11	52
17	2	19	3	53	1	49	4	24	4	49	3	1	13	7	15	50	7	5	7	9	14	50	11	37
18	2	1	3	57	1	37	4	34	4	39	3	22	13	22	15	44	6	38	7	34	14	54	11	21
19	1	43	4	1	1	25	4	43	4	30	3	44	13	36	15	37	6	12	7	58	14	56	11	4
20	1	25	4	5	1	13	4	51	4	20	4	6	13	49	15	30	5	45	8	21	14	58	10	46
21	1	7	4	8	1	1	4	59	4	9	4	29	14	2	15	22	5	19	8	45	14	59	10	28
22	0	49	4	10	0	49	5	6	3	57	4	51	14	14	15	15	4	52	9	8	15	0	10	30
23	0	31	4	12	0	37	5	13	3	45	4	13	14	26	15	3	4	26	9	32	15	0	9	52
24	0	16	4	13	0	24	5	19	3	32	5	35	14	37	14	52	4	0	9	53	15	0	9	34
25	0	S 2	4	11	0	8	5	24	3	19	5	57	14	47	14	40	3	32	10	13	14	58	9	16
26	0	12	4	9	0	4	5	29	3	5	6	19	14	57	14	27	3	3	10	32	14	55	8	58
27	0	26	4	8	0	A 16	5	33	2	51	6	41	15	7	14	13	3	33	10	51	14	51	8	40
28	0	41	4	6	0	28	5	37	2	37	7	2	15	16	13	58	2	3	11	10	14	47	8	22
29	0	56	4	5	0	42	5	40	2	23	7	23	15	25	13	42	1	33	11	29	14	42	8	4
30	1	11	4	3	0	52	5	43	2	9	7	44	15	34	13	25	0	59	11	48	14	36	7	45

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Canon conuertendi Horas, & Minuta Poſtmeridiem æquata in ſcrupula, perquæ in ſexagenaria Tabula quæſita extrahatur proportio quadriuicenaria.

Horæ, & Minuta Poſtmeridiem æquatæ. | Minuta Poſtmeridiem æquata.

horę I	0 / I	I / II	II / III		I	II	III
1	0	2	30	31	1	17	30
2	0	5	0	32	1	20	0
3	0	7	30	33	1	22	30
4	0	10	0	34	1	25	0
5	0	12	30	35	1	27	30
6	0	15	0	36	1	30	0
7	0	17	30	37	1	32	30
8	0	20	0	38	1	35	0
9	0	22	30	39	1	37	30
10	0	25	0	40	1	40	0
11	0	27	30	41	1	42	30
12	0	30	0	42	1	45	0
13	0	32	30	43	1	47	30
14	0	35	0	44	1	50	0
15	0	37	30	45	1	52	30
16	0	40	0	46	1	55	0
17	0	42	30	47	1	57	30
18	0	45	0	48	2	0	0
19	0	47	30	49	2	2	30
20	0	50	0	50	2	5	0
21	0	52	30	51	2	7	30
22	0	55	0	52	2	10	0
23	0	57	30	53	2	12	30
24	1	0	0	54	2	15	0
25	1	2	30	55	2	17	30
26	1	5	0	56	2	20	0
27	1	7	30	57	2	22	30
28	1	10	0	58	2	25	0
29	1	12	30	59	2	27	30
30	1	15	0	60	2	30	0

Canon pro proportione Latitudinum in interiſtitio quinque dierum .

Dies	M	
1	12	Numerus Quærendus
2	24	
3	36	In
4	48	
5	60	Tabula Sexagenar.

In Interſtitio ſex dierum

Dies	M	
1	10	Numerus Quærendus
2	20	
3	30	In
4	40	
5	50	Tabula Sexagenar.
6	60	

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TABVLA

SEXAGENARIA.

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Tabula Sexagenaria.

Dif.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	0 1	0 2	0 3	0 4	0 5	0 6	0 7	0 8	0 9	0 10	0 11	0 12	0 13	0 14	0 15
2	0 2	0 4	0 6	0 8	0 10	0 12	0 14	0 16	0 18	0 20	0 22	0 24	0 26	0 28	0 30
3	0 3	0 6	0 9	0 12	0 15	0 18	0 21	0 24	0 27	0 30	0 33	0 36	0 39	0 42	0 45
4	0 4	0 8	0 12	0 16	0 20	0 24	0 28	0 32	0 36	0 40	0 44	0 48	0 52	0 56	1 0
5	0 5	0 10	0 15	0 20	0 25	0 30	0 35	0 40	0 45	0 50	0 55	1 0	1 5	1 10	1 15
6	0 6	0 12	0 18	0 24	0 30	0 36	0 42	0 48	0 54	1 0	1 6	1 12	1 18	1 24	1 30
7	0 7	0 14	0 21	0 28	0 35	0 42	0 49	0 56	1 3	1 10	1 17	1 24	1 31	1 38	1 45
8	0 8	0 16	0 24	0 32	0 40	0 48	0 56	1 4	1 12	1 20	1 28	1 36	1 44	1 52	2 0
9	0 9	0 18	0 27	0 36	0 45	0 54	1 3	1 12	1 21	1 30	1 39	1 48	1 57	2 6	2 15
10	0 10	0 20	0 30	0 40	0 50	1 0	1 10	1 20	1 30	1 40	1 50	2 0	2 10	2 20	2 30
11	0 11	0 22	0 33	0 44	0 55	1 6	1 17	1 28	1 39	1 50	2 1	2 12	2 23	2 34	2 45
12	0 12	0 24	0 36	0 48	1 0	1 12	1 24	1 36	1 48	2 0	2 12	2 24	2 36	2 48	3 0
13	0 13	0 26	0 39	0 52	1 5	1 18	1 31	1 44	1 57	2 10	2 23	2 36	2 49	3 2	3 15
14	0 14	0 28	0 42	0 56	1 10	1 24	1 38	1 52	2 6	2 20	2 34	2 48	3 2	3 16	3 30
15	0 15	0 30	0 45	1 0	1 15	1 30	1 45	2 0	2 15	2 30	2 45	3 0	3 15	3 30	3 45
16	0 16	0 32	0 48	1 4	1 20	1 36	1 52	2 8	2 24	2 40	2 56	3 12	3 28	3 44	4 0
17	0 17	0 34	0 51	1 8	1 25	1 42	1 59	2 16	2 33	2 50	3 7	3 24	3 41	3 58	4 15
18	0 18	0 36	0 54	1 12	1 30	1 48	2 6	2 24	2 42	3 0	3 18	3 36	3 54	4 12	4 30
19	0 19	0 38	0 57	1 16	1 35	1 54	2 13	2 32	2 51	3 10	3 29	3 48	4 7	4 26	4 45
20	0 20	0 40	1 0	1 20	1 40	2 0	2 20	2 40	3 0	3 20	3 40	4 0	4 20	4 40	5 0
21	0 21	0 42	1 3	1 24	1 45	2 6	2 27	2 48	3 9	3 30	3 51	4 12	4 33	4 54	5 15
22	0 22	0 44	1 6	1 28	1 50	2 12	2 34	2 56	3 18	3 40	4 2	4 24	4 46	5 8	5 30
23	0 23	0 46	1 9	1 32	1 55	2 18	2 41	3 4	3 27	3 50	4 13	4 36	4 59	5 22	5 45
24	0 24	0 48	1 12	1 36	2 0	2 24	2 48	3 12	3 36	4 0	4 24	4 48	5 12	5 36	6 0
25	0 25	0 50	1 15	1 40	2 5	2 30	2 55	3 20	3 45	4 10	4 35	5 0	5 25	5 50	6 15
26	0 26	0 52	1 18	1 44	2 10	2 36	3 2	3 28	3 54	4 20	4 46	5 12	5 38	6 4	6 30
27	0 27	0 54	1 21	1 48	2 15	2 42	3 9	3 36	4 3	4 30	4 57	5 24	5 51	6 18	6 45
28	0 28	0 56	1 24	1 52	2 20	2 48	3 16	3 44	4 12	4 40	5 8	5 36	6 4	6 32	7 0
29	0 29	0 58	1 27	1 56	2 25	2 54	3 23	3 52	4 21	4 50	5 19	5 48	6 17	6 46	7 15
30	0 30	1 0	1 30	2 0	2 30	3 0	3 30	4 0	4 30	5 0	5 30	6 0	6 30	7 0	7 30

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Tabula Sexagenaria.

Dif.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
31	0 31	1 2	1 33	2 4	2 35	3 6	3 37	4 8	4 39	5 10	5 41	6 12	6 43	7 14	7 45
32	0 32	1 4	1 36	2 8	2 40	3 12	3 44	4 16	4 48	5 20	5 52	6 24	6 56	7 28	8 0
33	0 33	1 6	1 39	2 12	2 45	3 18	3 51	4 24	4 47	5 30	6 3	6 36	7 9	7 42	8 15
34	0 34	1 8	1 42	2 16	2 50	3 24	3 58	4 32	5 6	5 40	6 14	6 48	7 22	7 56	8 30
35	0 35	1 10	1 45	2 20	2 55	3 30	4 5	4 40	5 15	5 50	6 25	7 0	7 35	8 10	8 45
36	0 36	1 12	1 48	2 24	3 0	3 36	4 12	4 48	5 24	6 0	6 36	7 12	7 48	8 24	9 0
37	0 37	1 14	1 51	2 28	3 5	3 42	4 19	4 56	5 33	6 10	6 47	7 24	8 1	8 38	9 15
38	0 38	1 16	1 54	2 32	3 10	3 48	4 26	5 4	5 42	6 20	6 58	7 36	8 14	8 52	9 30
39	0 39	1 18	1 57	2 36	3 15	3 54	4 33	5 12	5 51	6 30	7 9	7 48	8 27	9 6	9 45
40	0 40	1 20	2 0	2 40	3 20	4 0	4 40	5 20	6 0	6 40	7 20	8 0	8 40	9 20	10 0
41	0 41	1 22	2 3	2 44	3 25	4 6	4 47	5 28	6 9	6 50	7 31	8 12	8 53	9 34	10 15
42	0 42	1 24	2 6	2 48	3 30	4 12	4 54	5 36	6 18	7 0	7 42	8 24	9 6	9 48	10 30
43	0 43	1 26	2 9	2 52	3 35	4 18	4 1	5 44	6 27	7 10	7 53	8 36	9 19	10 2	11 15
44	0 44	1 28	2 12	2 56	3 40	4 24	5 8	5 52	6 35	7 20	8 4	8 48	9 32	10 16	11 30
45	0 45	1 30	2 15	3 0	3 45	4 30	5 15	6 0	6 45	7 30	8 15	9 0	9 45	10 30	10 45
46	0 46	1 32	2 18	3 4	3 50	4 36	5 22	6 8	6 54	7 40	8 26	9 12	9 58	10 44	11 0
47	0 47	1 34	2 21	3 8	3 55	4 42	5 29	6 16	7 3	7 50	8 37	9 24	10 11	10 58	11 15
48	0 48	1 36	2 24	3 12	4 0	4 48	5 36	6 24	7 12	8 0	8 48	9 36	10 24	11 12	11 30
49	0 49	1 38	2 27	3 16	4 5	4 54	5 43	6 32	7 21	8 10	8 59	9 48	10 37	11 26	11 45
50	0 50	1 40	2 30	3 20	4 10	5 0	5 50	6 40	7 30	8 20	9 10	10 0	10 50	11 40	12 0
51	0 51	1 42	2 33	3 24	4 15	5 6	5 57	6 48	7 39	8 30	9 21	10 12	11 3	11 54	12 15
52	0 52	1 44	2 36	3 28	4 26	5 12	6 4	6 56	7 48	8 40	9 32	10 24	11 16	12 8	12 30
53	0 53	1 46	2 39	3 32	4 25	5 18	6 11	7 4	7 57	8 50	9 43	10 36	11 29	12 22	12 45
54	0 54	1 48	2 42	3 36	4 30	5 24	6 18	7 12	8 6	9 0	9 54	10 48	11 42	12 36	13 0
55	0 55	1 50	2 45	3 40	4 35	5 30	6 25	7 20	8 15	9 10	10 5	11 0	11 55	12 50	13 15
56	0 56	1 52	2 48	3 44	4 40	5 36	6 32	7 28	8 24	9 20	10 16	11 12	12 8	13 4	13 30
57	0 57	1 54	2 51	3 48	4 45	5 42	6 39	7 36	8 33	9 30	10 27	11 24	12 21	13 18	13 45
58	0 58	1 56	2 54	3 52	4 50	5 48	6 46	7 44	8 42	9 40	10 38	11 36	12 34	13 32	14 0
59	0 59	1 58	2 57	3 56	4 55	5 54	6 53	7 52	8 51	9 50	10 49	11 48	12 47	13 46	14 15
60	1 0	2 0	3 0	4 0	5 0	6 0	7 0	8 0	9 0	10 0	11 0	12 0	13 0	14 0	15 0

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Tabula Sexagenaria.

Dif.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	0 16	0 17	0 18	0 19	0 20	0 21	0 22	0 23	0 24	0 25	0 26	0 27	0 28	0 29	0 30
2	0 32	0 34	0 36	0 38	0 40	0 42	0 44	0 46	0 48	0 50	0 52	0 54	0 56	0 58	1 0
3	0 48	0 51	0 54	0 57	1 0	1 3	1 6	1 9	1 12	1 15	1 18	1 21	1 24	1 27	1 30
4	1 4	1 8	1 12	1 16	1 20	1 24	1 28	1 32	1 36	1 40	1 44	1 48	1 52	1 56	2 0
5	1 20	1 25	1 30	1 35	1 40	1 45	1 50	1 55	2 0	2 5	2 10	2 15	2 20	2 25	2 30
6	1 36	1 42	1 48	1 54	2 0	2 6	2 12	2 18	2 24	2 30	2 36	2 42	2 48	2 54	3 0
7	1 52	1 59	2 6	2 13	2 20	2 27	2 34	2 41	2 48	3 55	3 2	3 9	3 16	3 23	3 30
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9	2 24	2 53	2 42	2 51	3 0	3 9	3 18	3 27	3 36	3 45	3 54	4 3	4 12	4 21	4 30
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12	3 12	3 24	3 36	3 48	4 0	4 12	4 24	4 36	4 48	5 0	5 12	5 24	5 36	5 48	6 0
13	3 28	3 41	3 54	4 7	4 20	4 33	4 46	4 59	5 12	5 25	5 38	5 51	6 4	6 17	6 30
14	3 44	3 58	4 12	4 26	4 40	4 54	5 8	5 22	5 36	5 50	6 4	6 18	6 32	6 46	7 0
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16	4 16	4 32	4 41	5 4	5 20	5 36	5 52	6 8	6 24	6 40	6 56	7 12	7 28	7 44	8 0
17	32	4 49	5 6	5 23	5 40	5 57	6 14	6 31	6 48	7 5	7 22	7 39	7 56	8 13	8 30
18	4 48	5 6	5 24	5 42	6 0	6 18	6 36	6 54	7 12	7 30	7 48	8 6	8 24	8 42	9 0
19	5 4	5 23	5 42	6 1	6 20	6 39	6 58	7 17	7 36	7 55	8 14	8 33	8 52	9 11	9 30
20	5 20	5 40	6 0	6 20	6 40	7 0	7 20	7 40	8 0	8 20	8 40	9 0	9 20	9 40	10 0
21	5 36	5 57	6 18	6 39	7 0	7 21	7 42	8 3	8 24	8 45	9 6	9 27	9 48	10 9	10 30
22	5 52	6 14	6 36	6 58	7 20	7 42	8 4	8 26	8 48	9 10	9 32	9 54	10 16	10 38	11 0
23	6 8	6 31	6 54	7 17	7 40	8 3	8 26	8 49	9 12	9 35	9 58	10 21	10 44	11 7	11 30
24	6 24	6 48	7 12	7 36	8 0	8 24	8 48	9 12	9 36	10 0	10 24	10 48	11 12	11 36	12 0
25	6 40	7 5	7 30	7 55	8 20	8 45	9 10	9 35	9 0	10 25	10 50	11 15	11 40	12 5	12 30
26	6 56	7 22	7 48	8 4	8 40	9 6	9 32	9 58	10 24	10 50	11 16	11 42	12 8	12 34	13 0
27	7 12	7 39	8 6	8 33	9 0	9 27	9 54	10 21	10 48	11 15	11 42	12 9	12 36	13 3	13 30
28	7 28	7 56	8 24	8 52	9 20	9 48	10 16	10 44	11 12	11 40	12 8	12 36	13 4	13 32	14 0
29	7 44	8 13	8 42	9 11	9 40	10 9	10 38	11 7	11 36	12 5	12 34	13 3	13 32	14 1	14 30
30	8 0	8 30	9 0	9 30	10 0	10 30	11 0	11 30	12 0	12 30	13 0	13 30	14 0	14 30	15 0

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Tabula Sexagenaria.

Dif.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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32	8 32	9 4	9 36	10 8	10 40	11 12	11 44	12 16	12 48	13 20	13 52	14 24	14 56	15 28	16 0
33	8 48	9 21	9 54	10 27	11 20	11 33	12 6	12 39	13 12	13 45	14 18	14 51	15 24	15 57	16 30
34	9 4	9 38	10 12	10 46	11 0	11 54	12 28	13 2	13 36	14 10	14 40	15 18	15 52	16 26	17 0
35	9 20	9 55	10 30	11 5	11 40	12 15	12 50	13 25	14 20	14 35	15 10	15 45	16 20	16 55	17 30
36	9 36	10 12	10 48	11 24	12 0	12 36	13 12	13 48	14 24	15 0	15 36	16 12	16 48	17 24	18 0
37	9 52	10 29	11 6	11 43	12 20	12 57	13 34	14 11	14 48	15 25	16 22	16 39	16 16	17 53	18 30
38	10 8	10 46	11 24	12 2	12 40	13 18	13 56	14 34	15 12	15 50	16 28	17 6	17 44	18 22	19 0
39	10 24	11 3	11 42	12 21	13 0	13 39	14 18	14 57	15 36	16 15	16 54	17 33	18 12	18 51	19 30
40	10 40	11 20	12 0	12 40	13 20	14 0	14 40	15 20	16 0	16 40	17 20	18 0	18 40	19 20	20 0
41	10 56	11 37	12 18	12 59	13 40	14 21	15 2	15 43	16 24	17 5	17 46	18 27	19 8	19 49	20 30
42	11 12	11 54	12 36	13 18	14 0	14 42	15 24	16 6	16 48	17 30	18 12	18 54	19 36	20 8	21 0
43	11 28	12 11	12 54	13 37	14 20	15 3	15 46	16 29	17 12	17 55	18 38	19 21	20 4	20 47	21 30
44	11 44	12 28	13 12	13 56	14 40	15 24	16 8	16 52	17 36	18 20	19 4	19 48	20 32	21 16	22 0
45	12 0	12 45	13 30	14 15	15 0	15 45	16 30	17 15	18 0	18 45	19 30	20 15	21 0	21 45	23 30
46	12 16	13 2	13 48	14 34	15 20	16 6	16 52	17 38	18 24	19 10	19 56	20 42	21 28	22 14	23 0
47	12 32	13 19	14 6	14 53	15 40	16 27	17 14	18 1	18 48	19 35	20 22	21 9	21 56	22 43	23 30
48	12 48	13 36	14 24	15 12	16 0	16 48	17 36	18 24	19 12	20 0	20 48	21 36	22 24	23 12	24 0
49	13 4	13 53	14 42	15 31	16 20	17 9	16 58	18 47	19 36	20 25	21 14	22 3	22 52	23 41	24 30
50	13 20	14 10	15 0	15 50	16 40	17 30	18 20	19 10	20 0	20 50	21 40	22 30	23 20	24 10	25 0
51	13 36	14 27	15 18	16 9	17 0	17 51	18 42	19 35	20 24	21 15	22 6	22 57	23 48	24 39	25 30
52	13 52	14 44	15 36	16 28	17 20	18 12	19 4	19 56	20 48	21 40	22 32	23 24	24 16	25 8	26 0
53	14 8	15 1	15 54	16 47	17 40	18 33	19 27	20 19	21 12	22 5	22 58	23 51	24 44	25 37	26 30
54	14 24	15 18	16 1[illegible]	17 6	18 0	18 54	19 48	20 42	21 36	22 30	23 24	24 18	25 12	26 6	27 0
55	14 40	15 [illegible]	[illegible] 30	17 25	18 20	19 15	20 10	21 5	22 0	22 55	23 50	24 45	25 40	26 35	27 30
56	14 56	15 [illegible]	[illegible] 48	17 44	18 40	19 36	20 32	21 28	22 24	23 20	24 16	25 12	26 8	27 4	28 0
57	15 12	16 9	17 6	18 3	19 0	19 57	20 54	21 51	22 48	23 45	24 42	25 39	26 26	27 33	28 30
58	15 28	16 26	17 24	18 22	19 20	20 18	21 16	22 14	23 12	24 10	25 8	26 6	27 4	28 2	29 0
59	15 44	16 43	17 42	18 41	19 40	20 39	21 38	22 27	23 36	24 35	25 34	26 33	27 32	28 31	29 30
60	16 0	17 0	18 0	19 0	20 0	21 0	22 0	23 0	24 0	25 0	26 0	27 0	28 0	29 0	30 0

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Tabula Sexagenaria.

Dif.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
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2	1 2	1 4	1 6	1 8	1 10	1 12	1 14	1 16	1 18	1 20	1 27	1 24	1 26	1 28	1 30
3	1 33	1 36	1 39	1 42	1 45	1 48	1 51	1 54	1 57	2 0	2 3	2 6	2 9	2 12	2 15
4	2 4	2 8	2 12	2 26	2 20	2 24	2 28	2 32	2 30	2 40	2 44	2 48	2 52	2 56	3 0
5	2 35	2 40	2 45	2 50	2 55	3 0	3 5	3 10	3 15	3 20	3 25	3 30	3 35	3 40	3 45
6	3 6	3 12	3 18	3 14	3 30	3 36	3 42	3 48	3 54	4 0	4 6	4 12	4 18	4 24	4 30
7	3 37	3 44	3 51	3 58	4 5	4 12	4 19	4 26	4 33	4 40	4 47	4 54	5 1	5 8	5 15
8	4 8	4 16	4 24	4 32	4 40	4 48	4 56	5 4	5 12	5 20	5 28	5 36	5 44	5 52	6 0
9	4 39	4 48	4 57	5 6	5 15	5 24	5 33	5 42	5 51	6 0	6 5	6 18	6 27	6 36	6 45
10	5 10	5 20	5 30	5 40	5 50	6 0	6 10	6 20	6 30	6 40	6 50	7 0	7 10	7 20	7 30
11	5 41	5 52	6 3	6 14	6 25	6 36	6 47	6 58	7 9	7 20	7 31	7 42	7 53	8 4	8 5
12	6 12	6 24	6 36	6 48	7 0	7 12	7 24	7 36	7 48	8 0	8 12	8 24	8 36	8 48	9 0
13	6 43	6 56	7 9	7 22	7 35	7 48	8 1	8 14	8 27	8 20	8 53	9 6	9 19	9 32	9 45
14	7 14	7 28	7 42	7 56	8 10	8 28	8 38	8 52	9 6	9 0	9 34	0 48	10 2	10 16	10 30
15	7 45	8 0	8 15	8 30	8 45	9 0	9 15	9 30	9 45	10 0	10 15	10 30	10 45	11 0	11 15
16	8 16	8 32	8 48	9 4	9 20	9 30	9 52	10 8	10 24	10 40	10 56	11 12	11 28	11 44	12 0
17	8 47	9 4	9 21	9 38	9 55	10 12	10 29	10 46	11 3	1 20	11 37	11 54	12 11	12 28	12 55
18	9 18	9 36	9 54	10 12	10 30	10 48	11 6	11 24	11 42	12 0	12 18	12 36	2 54	13 2	13 30
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20	10 20	10 40	11 0	11 20	11 40	12 0	12 20	12 40	13 0	13 20	13 40	14 0	4 20	14 40	5 0
21	10 51	11 12	11 33	11 54	12 15	12 36	12 57	13 18	13 39	14 0	14 21	14 42	15 3	15 24	15 45
22	11 22	12 44	12 6	12 28	12 50	13 12	13 34	13 56	14 18	14 40	15 2	15 24	5 46	16 8	16 30
23	11 53	12 16	12 39	13 2	13 25	13 48	14 11	14 34	14 57	15 20	15 43	16 6	16 29	16 52	7 15
24	12 24	12 48	13 12	13 36	14 0	14 24	14 48	15 12	15 36	16 0	16 24	16 48	17 12	17 36	18 0
25	12 55	13 20	13 45	14 20	14 35	15 0	15 25	15 50	16 15	16 40	17 5	17 30	7 55	8 20	18 45
26	13 26	13 52	14 18	14 44	14 10	15 36	16 2	16 28	16 54	17 20	17 46	18 12	18 38	9 4	19 30
27	13 57	14 24	14 51	15 18	15 45	16 12	16 39	17 6	17 53	18 0	18 27	18 54	9 21	19 48	20 15
28	14 28	14 56	15 24	15 51	16 20	16 48	17 10	17 44	18 12	18 40	19 8	19 36	20 4	20 32	21 0
29	14 59	15 28	15 57	16 26	16 55	17 24	17 53	18 22	18 51	19 20	19 49	20 18	20 47	21 16	21 45
30	15 30	16 0	16 30	17 0	17 30	18 0	18 30	19 0	10 30	20 0	20 30	21 0	21 30	22 0	22 30

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Tabula Sexagenaria.

Dif.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
31	16 1	16 32	17 3	17 34	18 5	18 36	19 7	19 38	20 9	20 40	21 11	21 42	22 13	22 44	23 15
32	16 32	17 4	17 36	18 8	18 40	19 12	19 44	20 16	20 48	21 20	21 52	22 24	22 56	23 28	24 0
33	17 3	17 36	18 9	18 42	19 15	19 48	20 21	20 54	21 27	22 0	22 33	23 6	23 39	24 12	24 45
34	17 34	18 8	18 42	19 16	19 50	20 24	20 58	21 32	22 6	22 40	23 14	23 48	24 22	24 56	25 30
35	18 5	18 40	19 15	19 50	20 25	21 0	21 35	22 10	22 45	23 20	23 55	24 30	25 5	25 40	26 15
36	18 36	19 12	19 48	20 24	21 0	21 36	22 12	22 48	23 24	24 0	24 36	25 12	25 48	26 24	27 0
37	19 7	19 44	20 21	20 58	21 35	22 12	22 49	23 26	24 3	24 40	25 17	25 54	26 31	27 8	27 45
38	19 38	20 16	20 54	21 32	22 10	22 48	23 26	24 4	24 42	25 20	25 58	26 36	27 14	27 52	28 30
39	20 9	20 48	21 27	22 6	22 45	23 24	24 3	24 42	25 21	26 0	26 39	27 18	27 57	28 36	29 15
40	20 40	21 20	22 0	22 40	23 20	24 0	24 40	25 20	26 0	26 40	27 20	28 0	28 40	29 20	30 0
41	21 11	21 52	22 33	23 14	23 55	24 36	25 17	25 58	26 39	27 20	28 1	28 42	29 23	30 4	30 45
42	21 42	22 24	23 6	23 48	24 30	25 12	25 54	26 36	27 18	28 0	28 42	29 24	30 6	30 48	31 30
43	22 13	22 56	23 39	24 22	25 5	25 48	26 31	22 14	27 57	28 40	29 23	30 6	30 49	31 32	32 15
44	22 44	23 28	24 12	24 56	25 40	26 24	27 8	77 52	28 36	29 20	30 4	30 48	31 32	32 10	33 0
45	23 15	24 0	24 45	25 30	26 15	27 0	27 45	28 30	29 15	30 0	30 45	31 30	32 15	33 0	33 45
46	23 46	24 32	25 18	26 4	26 50	27 36	28 22	29 8	29 54	30 40	31 26	32 12	32 58	33 44	34 30
47	24 17	25 4	25 51	26 38	27 25	28 12	28 59	29 46	30 33	31 20	32 7	32 54	33 41	34 28	35 15
48	24 48	25 36	26 24	27 12	28 0	28 48	29 36	30 24	31 12	32 0	32 48	33 36	34 24	35 12	36 0
49	25 19	26 8	26 57	27 46	28 35	29 24	30 13	31 2	31 51	33 40	33 29	34 18	35 7	35 50	36 45
50	25 50	26 40	27 30	28 20	29 10	30 0	30 50	31 40	32 30	33 20	34 10	35 0	35 50	36 40	37 30
51	26 21	27 12	28 3	28 54	29 45	30 36	31 27	32 18	33 9	34 0	34 51	35 42	36 33	37 24	38 15
52	26 52	27 44	28 36	29 28	30 20	31 12	32 4	32 56	33 48	34 40	35 32	36 24	37 16	38 8	39 0
53	27 23	28 16	29 9	30 2	30 55	31 48	32 41	33 34	34 27	35 20	36 13	37 6	37 59	39 52	39 45
54	27 54	28 48	29 42	30 36	31 30	32 24	33 18	34 12	35 6	36 0	36 54	37 48	38 42	40 36	40 30
55	28 25	29 20	30 15	31 10	32 5	33 0	33 55	34 50	35 45	36 40	37 35	38 30	39 25	40 20	41 15
56	28 56	29 52	30 48	31 44	32 40	33 36	34 32	35 28	36 24	37 20	38 16	39 12	40 8	41 4	42 0
57	29 27	30 24	31 21	32 18	33 15	34 12	35 9	36 6	37 3	38 0	38 57	39 54	40 51	41 48	42 45
58	29 58	30 56	31 54	32 52	33 50	34 48	35 46	36 44	37 42	38 40	39 38	40 36	41 34	42 32	43 30
59	30 29	31 28	32 27	33 26	34 25	35 24	36 23	37 22	38 21	39 20	40 19	41 18	42 17	43 16	44 15
60	31 0	32 0	33 0	34 0	35 0	36 0	37 0	38 0	39 0	40 0	41 0	42 0	43 0	44 0	45 0

Tabula Sexagenaria.

Dif.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
1	0 46	0 47	0 48	0 49	0 50	0 51	0 52	0 53	0 54	0 55	0 56	0 57	0 58	0 59	1 0
2	1 32	1 34	1 36	1 38	1 40	1 42	1 44	1 46	1 48	1 50	1 52	1 54	1 56	1 58	2 0
3	2 18	2 21	2 24	2 27	2 30	2 33	2 36	2 39	2 42	2 45	2 48	2 51	2 54	2 57	3 0
4	3 4	3 8	3 12	3 16	3 20	3 24	3 28	3 32	3 36	3 40	3 44	3 48	3 52	3 56	4 0
5	3 50	3 55	4 0	4 5	4 10	4 15	4 20	4 25	4 30	4 35	4 40	4 45	4 50	4 55	5 0
6	4 36	4 42	4 48	4 54	5 0	5 6	5 12	5 18	5 24	5 30	5 36	5 42	5 48	5 54	6 0
7	5 22	5 29	5 36	5 43	5 50	5 57	6 4	6 11	6 18	6 25	6 32	6 39	6 46	6 53	7 0
8	6 8	6 16	6 24	6 32	6 40	6 48	6 56	7 4	7 12	7 20	7 28	7 36	7 44	7 52	8 0
9	6 54	7 3	7 12	7 21	7 30	7 39	7 48	7 57	8 6	8 15	8 24	8 33	8 42	8 51	9 0
10	7 4	7 50	8 0	8 10	8 20	8 30	8 40	8 50	9 0	9 10	9 20	9 30	9 40	9 50	10 0
11	8 26	8 37	8 48	8 59	9 10	9 21	9 32	9 43	9 54	10 5	10 16	10 27	10 38	10 49	11 0
12	9 12	9 24	9 36	9 48	10 0	10 12	10 24	10 6	10 48	11 0	11 12	11 24	11 36	11 48	12 0
13	9 58	10 11	10 24	10 37	10 50	11 3	11 16	11 29	11 42	11 55	12 8	12 21	12 34	12 47	13 0
14	10 44	10 58	11 12	11 26	11 40	11 54	12 8	12 22	12 36	12 50	13 4	13 18	13 32	13 46	14 0
15	11 30	11 45	12 0	12 15	12 30	12 45	13 0	13 15	13 30	13 45	14 0	14 15	14 30	14 45	15 0
16	12 16	12 32	12 48	13 4	13 20	13 36	13 52	14 8	14 24	14 40	14 56	15 12	15 28	15 44	16 0
17	13 2	13 19	13 36	13 53	14 20	14 27	14 44	15 1	15 18	15 35	15 52	16 9	16 26	16 43	17 0
18	13 48	14 6	14 24	14 42	15 0	15 18	15 36	15 54	16 12	16 30	16 48	17 6	17 24	17 42	18 0
19	14 34	14 53	15 12	15 31	15 50	16 9	16 28	16 47	17 6	17 25	17 44	18 3	18 22	18 41	19 0
20	15 20	15 40	16 0	16 20	16 40	17 0	17 20	17 40	18 0	8 20	18 40	10 0	19 20	19 40	20 0
21	16 6	16 27	16 48	17 9	17 30	17 51	18 12	18 33	18 54	19 15	19 36	19 57	20 18	20 39	21 0
22	16 52	17 14	17 36	17 58	18 20	18 42	19 4	19 26	19 48	20 10	20 32	20 54	21 16	21 38	22 0
23	17 38	18 1	18 24	18 47	19 10	19 33	19 56	20 19	20 42	21 5	21 28	21 51	22 14	22 37	23 0
24	18 24	18 48	19 12	19 36	20 0	20 24	20 48	21 12	21 36	22 0	22 24	22 48	23 12	23 36	24 0
25	19 10	19 35	20 0	20 25	20 50	21 15	21 40	22 5	22 30	22 55	23 20	23 45	24 10	24 35	25 0
26	19 56	20 22	20 48	21 14	21 40	22 6	22 32	22 58	23 24	23 50	24 16	24 42	25 8	25 34	26 0
27	20 42	21 9	21 36	22 3	22 30	22 57	23 24	23 51	24 18	24 45	25 12	25 39	26 6	26 33	27 0
28	21 28	21 56	22 24	22 52	23 20	23 48	24 16	24 44	25 12	25 40	26 8	26 36	27 4	27 32	28 0
29	22 14	22 43	23 12	23 41	24 10	24 39	25 8	25 37	26 6	26 35	27 4	27 33	28 2	28 31	29 0
30	23 0	23 30	24 0	24 30	25 0	25 30	26 0	26 30	27 0	27 30	28 0	28 30	29 0	29 30	30 0

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Tabula Sexagenaria.

Dif.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
31	23 46	24 17	24 48	25 19	25 50	26 21	26 52	27 23	27 54	28 25	28 56	29 27	29 58	30 29	31 0
32	24 32	25 4	25 36	26 8	26 40	27 12	27 44	28 16	28 48	29 20	29 52	30 24	30 56	31 28	32 0
33	25 18	25 51	26 24	26 57	27 30	28 3	28 36	29 9	29 42	30 15	30 48	31 21	31 54	32 27	33 0
34	26 4	26 38	17 12	27 46	28 20	28 54	29 28	30 2	30 36	31 10	31 44	32 18	32 52	33 26	34 0
35	26 50	27 25	28 0	28 35	29 10	29 45	30 20	30 55	31 30	32 5	32 40	33 15	33 50	34 25	35 0
36	27 36	28 12	28 48	29 24	30 0	30 36	31 12	31 48	32 24	33 0	33 36	34 12	34 48	35 24	36 0
37	28 22	28 59	29 36	30 13	30 50	31 27	32 4	32 41	33 18	33 55	34 32	35 9	35 46	36 23	37 0
38	29 8	29 46	30 24	31 2	31 40	32 18	32 56	33 34	34 12	34 50	35 28	39 6	36 44	37 22	38 0
39	29 54	30 33	31 12	31 51	32 30	33 9	33 48	34 27	35 6	35 45	36 24	37 3	37 42	38 21	39 0
40	30 40	31 20	32 0	32 40	33 20	34 0	34 40	35 20	36 0	36 40	37 20	38 0	38 40	39 20	40 0
41	31 26	32 7	32 48	33 29	34 10	34 51	35 32	36 13	36 54	37 35	38 16	38 57	39 38	40 19	41 0
42	32 12	32 54	33 36	34 18	35 0	35 42	36 24	37 6	37 48	38 30	39 12	39 54	40 36	41 18	42 0
43	32 58	33 41	34 24	35 7	35 50	36 33	37 16	37 59	38 42	39 25	40 8	40 51	41 34	42 27	43 0
44	33 44	34 28	35 12	35 56	36 40	37 24	38 8	38 52	29 36	40 20	41 4	41 48	42 32	43 16	44 0
45	34 30	35 15	36 0	36 45	37 30	38 15	39 0	39 45	40 30	41 15	42 0	42 45	43 30	44 15	45 0
46	35 16	36 2	36 48	37 34	38 20	39 6	39 52	40 38	41 24	42 10	42 56	43 42	44 28	45 14	46 0
47	36 2	36 49	37 36	38 23	39 10	39 57	40 44	41 31	42 18	43 5	43 52	44 39	45 26	46 13	47 0
48	36 48	37 36	38 24	39 12	40 0	40 48	41 36	42 24	43 12	44 0	44 48	45 36	46 24	47 12	48 0
49	37 34	38 23	39 12	40 1	40 50	41 39	42 28	43 17	44 6	44 55	45 44	46 33	47 22	48 11	49 0
50	38 20	39 10	40 0	40 50	41 40	42 30	43 20	44 10	45 0	45 50	46 40	47 30	48 20	49 10	50 0
51	39 6	39 57	40 48	41 39	42 30	43 21	44 12	45 3	45 54	46 45	47 36	48 27	49 18	50 9	51 0
52	39 52	40 44	41 36	42 28	43 20	44 12	45 4	45 56	46 48	47 40	48 32	49 24	50 16	41 8	52 0
53	40 38	41 31	42 24	43 17	44 10	45 3	45 56	46 49	47 42	48 35	49 28	50 21	51 14	52 7	53 0
54	41 24	42 18	43 12	44 6	45 0	45 54	46 48	47 42	48 36	49 30	50 24	51 18	52 12	53 6	54 0
55	42 10	43 5	44 0	44 55	45 50	46 45	47 40	48 35	49 30	50 25	51 20	52 15	53 10	54 5	55 0
56	42 56	43 52	44 48	45 44	46 40	47 36	48 32	49 28	50 24	51 20	52 16	53 12	54 8	55 4	56 0
57	43 42	44 39	45 36	46 33	47 30	48 27	49 24	50 21	51 18	52 15	53 12	54 9	55 6	56 3	57 0
58	44 28	45 26	46 24	47 22	48 20	49 18	50 16	51 14	52 12	53 10	54 8	55 6	56 4	57 2	58 0
59	45 14	46 13	47 12	48 11	49 10	50 9	51 8	52 7	53 6	54 5	55 4	56 3	57 2	58 1	59 0
60	46 0	47 0	48 0	49 0	50 0	51 0	52 0	53 0	54 0	55 0	56 0	57 0	58 0	59 0	60 0

Horæ o. Aſcenſionis rectæ medij Cęli.

Minuta

	Decimæ		Vndec.		Duodec.		Horoſcopi		Secundæ		Tertiæ	
	♈		♉		♊		♋		♌		♍	
	G	M	G	M	G	M	G	M	G	M	G	M
0	0	0	9	53	22	9	21	23	12	38	3	12
1	0	16	10	11	22	24	21	35	12	50	3	26
2	0	33	10	29	22	38	21	47	13	2	3	39
3	0	49	10	48	22	53	21	58	13	13	3	52
4	1	5	11	6	23	8	22	10	13	25	4	5
5	1	22	11	24	23	23	22	22	13	37	4	19
6	1	38	11	43	23	37	22	34	13	49	4	32
7	1	55	11	1	23	52	22	46	14	1	4	45
8	2	11	12	20	24	7	22	58	14	13	4	58
9	2	27	12	38	24	21	23	10	14	24	5	11
10	2	44	12	56	24	35	23	22	14	36	5	25
11	3	0	13	14	24	49	23	34	14	48	5	38
12	3	16	13	32	25	3	23	46	15	0	5	51
13	3	33	13	50	25	17	23	58	15	12	6	4
14	3	49	14	8	25	31	24	9	15	23	6	18
15	4	5	14	26	25	46	24	21	15	35	6	31
16	4	22	14	44	26	0	24	33	15	46	6	44
17	4	38	15	2	26	14	24	44	15	58	6	57
18	4	54	15	20	26	28	24	56	16	10	7	11
19	5	11	15	38	26	43	25	8	16	22	7	24
20	5	27	15	55	26	57	25	20	16	34	7	37
21	5	44	16	13	27	11	25	32	16	46	7	50
22	6	0	16	31	27	25	25	43	16	58	8	4
23	6	16	16	48	27	39	25	55	17	9	8	17
24	6	33	17	6	27	53	26	7	17	21	8	30
25	6	49	17	24	28	7	26	19	17	33	8	43
26	7	5	17	42	28	20	26	31	17	44	8	56
27	7	22	18	0	28	34	26	43	17	56	9	10
28	7	38	18	17	28	48	26	54	18	8	9	23
29	7	54	18	35	29	3	27	6	18	20	9	37

Tabula

Horæ o. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndeci.		Duodec.		Horoſcopi		Secundæ		Tertiæ	
	♈		♉		♊		♋		♌		♍	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
30	8	11	18	52	29	16	27	18	18	32	9	50
31	8	27	19	9	29	30	27	29	18	43	10	4
32	8	41	19	27	29	44	27	41	18	55	10	17
33	9	0	19	44	29	57	27	52	19	7	10	30
34	9	16	20	1	0 ♋	11	28	4	19	19	10	44
35	9	32	20	19	0	25	28	16	19	30	10	57
36	9	48	20	36	0	38	28	27	19	42	11	11
37	10	4	20	54	0	52	28	39	19	54	11	24
38	10	20	21	12	1	5	28	51	20	5	11	38
39	10	36	21	29	1	19	29	2	20	17	11	51
40	10	53	21	46	1	32	29	14	20	29	12	4
41	11	9	22	3	1	46	29	25	20	41	12	18
42	11	26	22	20	1	59	29	36	20	52	12	31
43	11	42	22	37	2	13	29	48	21	4	12	44
44	11	58	22	54	2	26	29 ♌	59	21	16	12	57
45	12	14	23	11	2	40	0	11	21	28	13	11
46	12	30	23	28	2	54	0	23	21	39	13	24
47	12	46	23	45	3	7	0	34	21	51	13	38
48	13	3	24	2	3	21	0	46	22	3	13	51
49	13	19	24	19	3	34	0	58	22	15	14	4
50	13	35	24	36	3	47	1	9	22	26	14	18
51	13	52	24	52	4	1	1	21	22	38	14	31
52	14	8	25	9	4	14	1	32	22	50	14	45
53	14	25	25	26	4	28	1	44	23	2	14	58
54	14	41	25	42	4	41	1	55	23	13	15	12
55	14	57	25	59	4	55	2	7	23	25	15	25
56	15	13	26	15	5	8	2	18	23	37	15	39
57	15	29	26	32	5	21	2	30	23	48	15	52
58	15	45	26	49	5	34	2	42	24	0	16	5
59	16	1	27	6	5	48	2	53	24	12	16	19

Digitized by Google

Horæ 1. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♈		♉		♋		♌		♌		♍	
	G	M	G	M	G	M	G	M	G	M	G	M
0	16	17	27	22	6	1	3	5	24	23	16	32
1	16	33	27	39	6	14	3	16	24	35	16	46
2	16	49	27	56	6	27	3	27	24	47	16	59
3	17	6	28	12	6	40	3	39	24	58	17	13
4	17	22	28	28	6	53	3	50	25	10	17	26
5	17	38	28	45	7	6	4	2	25	22	17	39
6	17	54	29	1	7	19	4	13	25	34	17	53
7	18	10	29	17	7	32	4	25	25	46	18	6
8	18	27	29	34	7	45	4	36	25	58	18	20
9	18	43	29	50	7	58	4	48	26	9	18	33
10	18	59	0 ♊	7	8	11	4	59	26	21	18	47
11	19	15	0	23	8	24	5	11	26	33	19	0
12	19	31	0	39	8	37	5	22	26	45	19	13
13	19	47	0	56	8	50	5	33	26	57	19	27
14	20	3	1	12	9	3	5	44	27	9	19	40
15	20	19	1	28	9	16	5	56	27	11	19	54
16	20	35	1	44	9	29	6	7	27	32	20	7
17	20	51	2	0	9	42	6	18	27	44	20	21
18	21	7	2	16	9	55	6	30	27	56	20	34
19	21	23	2	32	10	8	6	42	28	8	20	47
20	21	39	2	48	10	21	6	53	28	19	21	1
21	21	55	3	4	10	33	7	5	28	31	21	14
22	22	11	3	20	10	46	7	16	28	43	21	28
23	22	27	3	36	10	59	7	27	28	55	21	41
24	22	43	3	52	11	12	7	39	29	6	21	55
25	22	59	4	7	11	25	7	50	29	18	22	8
26	23	15	4	23	11	38	8	2	29	30	22	21
27	23	32	4	39	11	51	8	13	29	43	22	35
28	23	40	4	55	12	3	8	24	29 ♍	54	22	48
29	23	53	5	11	12	16	8	36	0	6	23	2

Tabu-

Minuta

Horæ 1. Aſcenſionis rectæ medij Cęli.	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♈		♊		♋		♌		♍		♍	
	G	M	G	M	G	M	G	M	G	M	G	M
30	24	19	5	26	12	28	8	47	0	17	23	15
31	24	35	5	42	12	41	8	58	0	29	23	29
32	24	51	5	58	12	53	9	10	0	41	23	42
33	25	7	6	14	13	6	9	22	0	53	23	56
34	25	23	6	29	13	19	9	33	1	5	24	9
35	25	39	6	45	13	31	9	45	1	16	24	23
36	25	54	7	1	13	44	9	56	1	28	24	36
37	26	10	7	17	13	57	10	8	1	40	24	50
38	26	26	7	32	14	9	10	19	1	51	25	4
39	26	42	7	48	14	22	10	30	2	3	25	17
40	26	58	8	3	14	35	10	42	2	15	25	30
41	27	14	8	18	14	47	10	53	2	27	25	44
42	27	30	8	34	15	0	11	4	2	39	25	57
43	27	46	8	40	15	13	11	16	2	51	26	11
44	28	1	9	4	15	25	11	27	3	2	26	24
45	28	17	9	20	15	38	11	38	3	14	26	38
46	28	33	9	35	15	50	11	49	3	26	26	51
47	28	49	9	51	16	2	12	0	3	38	27	5
48	29	4	10	6	16	15	12	11	3	50	27	18
49	29	20	10	21	16	27	12	23	4	2	27	32
50	29	35	10	37	16	39	12	34	4	13	27	45
51	29	51	10	52	16	52	12	46	4	25	27	59
52	♉ 0	6	11	7	17	4	12	57	4	37	28	13
53	0	22	11	22	17	17	13	8	4	49	28	26
54	0	37	11	83	17	29	13	20	5	2	28	39
55	0	53	11	53	17	42	13	31	5	12	28	53
56	1	9	12	8	17	54	13	43	5	24	29	6
57	1	25	12	23	18	7	13	54	5	36	29	20
58	1	40	12	38	18	19	14	5	5	48	29	33
59	1	56	12	53	18	31	14	17	5	59	29	47

Tabu-

Minuta	Horæ 2. Aſcenſionis rectæ medij Cęli.											
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♉		♊		♋		♌		♍		♎	
	G	M	G	M	G	M	G	M	G	M	G	M
0	2	12	13	8	18	44	14	28	6	11	0	0
1	2	27	13	23	18	56	14	40	6	23	0	13
2	2	43	13	37	19	8	14	51	6	35	0	27
3	2	59	13	52	19	21	15	2	6	47	0	40
4	3	14	14	7	19	33	15	14	6	58	0	54
5	3	30	14	22	19	45	15	25	7	10	1	7
6	3	45	14	37	19	58	15	36	7	22	1	21
7	4	1	14	52	20	10	15	47	7	34	1	34
8	4	17	15	7	20	22	15	59	7	46	1	47
9	4	32	15	22	20	34	16	10	7	58	2	1
10	4	47	15	36	20	46	16	21	8	9	2	15
11	5	3	15	51	20	58	16	33	8	21	2	28
12	5	19	16	6	21	11	16	44	8	33	2	42
13	5	34	16	21	21	23	16	55	8	45	2	55
14	5	50	16	35	21	35	17	7	8	57	3	9
15	6	6	16	50	21	48	17	18	9	9	3	22
16	6	21	17	5	22	0	17	29	9	21	3	36
17	6	37	17	19	22	12	17	41	9	32	3	49
18	6	52	17	34	22	24	17	52	9	44	4	3
19	7	7	17	48	22	36	18	3	9	56	4	16
20	7	22	18	3	22	48	18	14	10	8	4	30
21	7	37	18	17	23	0	18	26	10	20	4	43
22	7	53	18	32	23	12	18	37	10	32	4	56
23	8	8	18	46	23	25	18	49	10	44	5	10
24	8	23	19	1	23	37	19	0	10	56	5	24
25	8	38	19	15	23	49	19	11	11	8	5	37
26	8	54	19	30	24	2	19	23	11	20	5	51
27	9	9	19	45	24	14	19	34	11	32	6	4
28	9	25	19	59	24	26	19	46	11	43	6	18
29	9	40	20	14	24	38	19	57	11	55	6	31

Tabu-

Minuta	Horæ 2. Aſcenſionis rectæ medij Cęli.											
	Decimæ		Vndec.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♉ G	M	♊ G	M	♋ G	M	♌ G	M	♍ G	M	♎ G	M
30	9	55	20	28	24	50	20	8	12	7	6	45
31	10	11	20	43	25	2	20	20	12	19	6	58
32	10	26	20	57	25	14	20	31	12	31	7	12
33	10	41	21	11	25	26	20	42	12	43	7	25
34	10	57	21	26	25	38	20	53	12	54	7	39
35	11	12	21	40	25	50	21	5	13	6	7	52
36	11	27	21	54	26	2	21	16	13	18	8	5
37	11	42	22	9	26	15	21	27	13	30	8	19
38	11	57	22	23	26	27	21	38	13	42	8	32
39	12	12	22	37	26	39	21	50	13	54	8	46
40	12	27	22	51	26	51	22	1	14	6	8	59
41	12	43	23	6	27	3	22	12	14	17	9	13
42	12	58	23	20	27	15	22	24	14	29	9	26
43	13	13	23	34	27	27	22	35	14	41	9	39
44	13	28	23	48	27	39	22	46	14	53	9	53
45	13	44	24	2	27	51	22	58	15	5	10	6
46	13	59	24	16	28	3	23	9	15	17	10	20
47	14	14	24	30	28	15	23	20	15	29	10	33
48	14	29	24	44	28	27	23	32	15	41	10	47
49	14	44	24	58	28	39	23	43	15	53	11	0
50	14	59	25	12	28	51	23	54	16	5	11	13
51	15	14	25	26	29	2	24	5	16	17	11	27
52	15	29	25	40	29	14	24	17	16	29	11	40
53	15	44	25	54	29	26	24	28	16	41	11	54
54	15	59	26	8	29	38	24	39	16	53	12	7
55	16	14	26	23	29	50	24	50	17	5	12	21
56	16	29	26	37	0 ♌	2	25	2	17	17	12	34
57	16	44	26	51	0	14	25	13	17	28	12	47
58	16	59	27	6	0	26	25	24	17	40	13	1
59	17	14	27	19	0	38	25	36	17	52	13	14

Horæ 3. Aſcenſionis rectæ medij Celi.

Minuta	Decimæ ♉ G	M	Vndec. ♊ G	M	Duodec. ♌ G	M	Horoſcopi ♌ G	M	Secundæ ♍ G	M	Tertiæ ♎ G	M
0	17	29	27	33	0	50	25	47	18	4	13	28
1	17	44	27	47	1	2	25	58	18	16	13	41
2	17	59	28	1	1	14	26	10	18	28	13	55
3	18	14	28	15	1	26	26	21	18	39	14	8
4	18	29	28	29	1	38	26	33	18	51	14	21
5	18	44	28	42	1	50	26	44	19	3	14	35
6	18	59	28	56	2	2	26	55	19	15	14	48
7	19	14	29	10	2	13	27	7	19	27	15	2
8	19	28	29	24	2	25	27	18	19	39	15	15
9	19	43	29	37	2	37	27	30	19	51	15	29
10	19	58	29	51	2	49	27	41	20	3	15	42
11	20	13	♋ 0	5	3	1	27	52	20	15	15	56
12	20	28	0	18	3	13	28	4	20	27	16	9
13	20	43	0	32	3	24	28	15	20	39	16	22
14	20	58	0	45	3	36	28	26	20	51	16	36
15	21	13	0	59	3	48	28	38	21	2	16	49
16	21	27	1	13	4	0	28	49	21	14	17	3
17	21	42	1	26	4	12	29	0	21	26	17	16
18	21	57	1	39	4	24	29	11	21	38	17	29
19	22	12	1	53	4	36	29	23	21	50	17	42
20	22	26	2	6	4	47	29	34	22	2	17	[illegible]
21	22	41	2	20	4	59	29	46	22	14	18	9
22	22	56	2	34	5	11	29	57	22	38	18	22
23	23	11	2	47	5	23	♍ 0	8	22	26	18	36
24	23	25	3	1	5	34	0	20	22	50	18	49
25	23	40	3	15	5	46	0	31	23	2	19	3
26	23	54	3	28	5	59	0	43	23	14	19	16
27	24	9	3	42	6	9	0	54	23	26	19	30
28	24	23	3	55	6	21	1	5	23	38	19	43
29	24	38	4	9	6	33	1	16	23	50	19	56

Tabu-

	Horæ 3. Aſcenſionis rectæ medij Cęli.											
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♉		♋		♌		♍		♍		♎	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
35	24	52	4	23	6	45	1	28	24	2	20	10
31	25	7	4	36	6	57	1	39	24	14	20	23
32	25	21	4	50	7	9	1	50	24	26	20	37
33	25	36	5	4	7	21	2	2	24	38	20	50
34	25	51	5	17	7	32	2	13	24	50	21	4
35	26	5	5	30	7	44	2	24	25	2	21	17
36	26	20	5	44	7	56	2	36	25	14	21	30
37	26	35	5	57	8	8	2	47	25	26	21	43
38	26	49	6	11	8	20	2	58	25	38	21	56
39	27	4	6	24	8	32	3	10	25	50	21	10
40	27	18	6	38	8	43	3	21	26	2	22	23
41	27	33	6	51	8	55	3	32	26	13	22	36
42	27	47	7	4	9	7	3	44	26	25	22	49
43	28	2	7	18	9	19	3	55	26	38	23	3
44	28	16	7	31	9	31	4	6	26	49	23	16
45	28	31	7	45	9	43	4	17	27	1	23	29
46	28	45	7	59	9	54	4	29	27	23	23	42
47	29	0	8	12	10	6	4	40	27	25	23	56
48	29	14	8	25	10	18	4	52	27	37	24	9
49	29	29	8	30	10	30	5	3	27	49	24	22
50	29	44	8	52	10	41	5	14	28	1	24	35
51	29	58	9	5	10	52	5	26	28	13	24	49
52	0 ♊	12	9	19	11	5	5	37	28	24	25	2
53	0	26	9	32	11	16	5	48	28	36	25	15
54	0	41	9	45	11	28	5	59	28	48	25	28
55	0	45	9	58	11	40	6	11	29	0	25	41
56	1	9	10	12	11	51	6	22	29	12	25	55
57	1	24	10	25	12	3	6	33	29	24	26	8
58	1	39	10	38	12	26	6	45	29	36	26	21
59	1	53	10	51	12	15	6	56	29	48	26	34

Horæ 4. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♊		♋		♌		♍		♎		♎	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
0	2	7	11	4	12	38	7	8	0	0	26	48
1	2	22	11	18	12	50	7	19	0	12	27	1
2	2	36	11	31	13	2	7	31	0	34	27	14
3	2	50	11	44	13	31	7	42	0	36	27	27
4	3	4	11	57	13	53	7	53	0	48	27	41
5	3	19	12	11	13	37	8	5	1	0	27	52
6	3	33	12	24	13	49	8	16	1	12	28	7
7	3	47	12	37	14	1	8	27	1	24	28	20
8	4	1	12	50	14	13	8	39	1	36	28	34
9	4	15	13	3	14	24	8	50	1	47	23	47
10	4	29	13	17	14	36	9	1	1	59	29	0
11	4	43	13	30	14	48	9	13	2	11	29	12
12	4	57	13	43	15	0	9	24	2	23	29	26
13	5	12	13	56	15	12	9	36	2	35	29	40
14	5	26	14	9	15	23	9	47	2	47	29	53
15	5	40	14	22	15	45	9	58	2	59	0	0
16	5	54	14	35	15	47	10	10	3	11	0	19
17	6	9	14	49	15	58	10	92	3	23	0	33
18	6	23	15	2	16	10	10	33	3	35	0	46
19	6	37	15	15	16	22	10	45	3	47	0	59
20	6	51	15	28	16	34	10	15	3	58	1	12
21	7	6	15	41	16	46	11	8	4	10	1	25
22	7	20	15	54	16	58	11	19	4	22	1	38
23	7	34	16	7	17	9	11	30	4	34	1	51
24	7	48	16	20	17	22	11	42	4	46	2	4
25	8	2	16	33	17	33	11	53	4	58	2	18
26	8	16	16	46	17	44	12	4	5	10	2	31
27	3	30	16	95	17	56	12	16	5	22	2	44
28	8	44	17	12	18	8	12	27	5	34	2	57
29	8	58	17	26	18	20	12	39	5	46	3	11

Tabu-

Minuta	Horæ 4 Aſcenſionis rectæ medij Cæli.											
	Decimæ		Vndeci.		Dundec.		Hroſcop.		Secuudæ		Tertiæ	
	♊		♋		♌		♍		♎		♏	
	G	M	G	M	G	M	G	M	G	M	G	M
30	9	12	17	39	18	32	12	50	5	58	3	24
31	9	26	17	52	18	43	13	1	6	10	3	37
32	9	40	18	5	18	55	13	13	6	22	3	50
33	9	55	18	18	19	7	13	24	6	34	4	4
34	10	9	18	31	19	19	13	35	6	46	4	17
35	10	23	18	44	19	30	13	46	6	58	4	30
36	10	37	18	57	19	42	13	58	7	10	4	43
37	10	51	19	10	19	54	14	9	7	22	4	56
38	11	5	19	24	20	5	14	21	7	34	5	10
39	11	19	19	37	20	17	14	33	7	46	5	23
40	11	33	19	50	20	29	14	44	7	58	5	36
41	11	47	20	3	20	41	14	55	8	10	5	49
42	12	1	20	15	20	52	15	7	8	22	6	2
43	12	15	20	28	21	4	15	18	8	34	6	15
44	12	29	20	41	21	16	15	30	8	46	6	28
45	12	43	20	54	21	28	15	41	3	58	6	41
46	12	57	21	7	21	39	15	52	9	9	6	54
47	13	11	21	20	21	51	16	4	9	21	7	7
48	13	24	21	33	22	3	16	15	9	33	7	20
49	13	38	21	46	22	15	16	27	9	45	7	33
50	13	52	21	59	22	26	16	38	9	57	7	46
51	14	6	22	22	22	38	16	49	10	9	7	59
52	14	20	22	25	22	50	17	2	10	21	8	12
53	14	34	22	38	23	2	17	13	10	33	8	25
54	14	48	22	51	23	13	17	24	10	45	8	38
55	15	2	23	4	23	25	17	35	10	57	8	51
56	15	19	23	17	23	37	17	47	11	9	9	4
57	15	30	23	30	23	48	17	58	11	21	9	17
58	15	44	23	43	24	0	18	9	11	32	9	30
59	15	58	23	56	24	12	18	21	11	44	9	43

Tabu-

Horæ 5. Aſcenſionis rectæ medij Celi.												
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♊		♋		♌		♍		♎		♏	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
0	16	12	24	9	24	23	18	32	11	56	9	57
1	16	26	24	22	24	35	18	44	12	8	10	10
2	16	40	24	35	24	47	18	55	12	20	10	23
3	16	54	24	48	24	58	19	7	12	32	10	36
4	17	7	25	1	25	10	19	18	12	43	10	49
5	17	21	25	14	25	22	19	30	12	55	11	2
6	17	35	25	27	25	34	19	41	13	7	11	15
7	17	49	25	40	25	46	19	52	13	19	11	28
8	18	3	25	53	25	58	20	4	13	31	11	41
9	18	16	26	6	26	9	20	15	13	43	11	54
10	18	30	26	19	26	21	20	27	13	55	12	7
11	18	44	26	32	26	33	20	38	14	7	12	20
12	18	58	26	55	26	45	20	50	14	19	12	33
13	19	12	26	58	26	57	21	2	14	31	12	46
14	19	26	27	11	27	9	21	13	14	43	12	59
15	19	40	27	24	27	21	21	24	14	55	13	12
16	19	54	27	37	27	32	21	36	15	7	13	25
17	20	8	27	50	27	44	21	47	15	19	13	38
18	20	21	28	3	27	56	21	58	15	31	13	51
19	20	35	28	15	28	8	22	10	15	43	14	4
20	20	49	28	28	28	19	22	22	15	54	14	17
21	21	3	28	51	28	31	22	33	16	6	14	30
22	21	16	28	54	28	43	22	45	16	18	14	43
23	21	30	29	7	28	55	22	56	16	30	14	57
24	21	44	29	20	29	6	23	8	16	42	15	10
25	21	58	29	32	29	18	23	19	16	44	15	2
26	22	12	29	45	29	30	23	30	17	6	15	36
27	22	16	29	48	29	42	23	42	17	17	15	49
28	22	40	0 ♌	11	29 ♍	54	23	54	17	29	16	2
29	22	53	0	24	0	6	24	5	17	41	16	15

Tabula

Horæ 5. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♊ G	M	Vndec. ♌ G	M	Duodec. ♍ G	M	Horoſcop. ♍ G	M	Secundæ ♎ G	M	Tertiæ ♏ G	M
30	23	7	0	37	0	17	24	16	17	53	16	28
31	23	21	0	50	0	29	24	28	18	5	16	41
32	23	25	1	3	0	41	24	39	18	17	16	54
33	23	48	1	16	0	53	24	51	18	28	17	7
34	24	2	1	29	1	5	25	2	18	40	17	20
35	24	16	1	42	1	16	25	14	18	52	17	33
36	24	30	1	55	1	28	25	25	19	4	17	45
37	24	43	2	8	1	40	25	36	19	16	17	58
38	24	57	2	21	1	51	25	48	19	28	18	11
39	25	11	2	33	2	3	25	59	19	40	18	24
40	25	25	2	46	2	15	26	11	19	52	18	37
41	25	38	2	59	2	27	26	22	20	4	18	50
42	25	52	3	12	2	39	26	34	20	16	19	3
43	26	6	3	25	2	51	26	45	20	28	19	15
44	26	20	3	38	3	2	26	57	20	39	19	28
45	26	33	3	51	3	14	27	8	20	51	19	41
46	26	47	4	3	3	26	27	20	21	3	19	54
47	27	1	4	16	3	38	27	31	21	15	20	7
48	27	15	4	29	3	50	27	43	21	27	20	20
49	27	29	4	42	4	2	27	54	21	39	20	33
50	27	43	4	55	4	13	28	5	21	51	20	46
51	27	56	5	8	4	25	28	18	22	2	20	59
52	28	10	5	21	4	37	28	28	22	14	21	12
53	28	23	5	33	4	49	28	40	22	26	21	25
54	28	37	5	46	5	1	28	52	22	38	21	38
55	28	51	5	59	5	12	29	3	22	50	21	51
56	29	5	6	12	5	24	39	14	23	2	22	4
57	29	18	6	25	5	36	29	26	23	13	22	17
58	29	32	6	28	5	48	29	37	23	25	22	30
59	29	46	6	59	5	59	29	49	23	37	22	43

Tabu-

Horæ 6. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♋ G	M	Vndec. ♌ G	M	Duodec. ♍ G	M	Horoſcop. ♎ G	M	Secundæ ♎ G	M	Tertiæ ♏ G	M
0	0	0	7	4	6	11	0	0	23	49	22	56
1	0	14	7	17	6	23	0	12	24	1	23	9
2	0	28	7	30	6	35	0	23	24	12	23	22
3	0	42	7	43	6	47	0	34	24	24	23	35
4	0	55	7	56	6	58	0	46	24	36	23	48
5	1	9	8	9	7	10	0	58	24	48	24	1
6	1	23	8	22	7	22	1	9	24	59	24	14
7	1	37	8	36	7	34	1	20	25	11	24	27
8	1	50	8	48	7	46	1	32	25	23	24	39
9	2	4	9	2	7	58	1	43	25	35	24	52
10	2	18	9	14	8	9	1	55	25	47	25	5
11	2	32	9	27	8	21	2	6	25	58	25	18
12	2	45	9	40	8	23	2	18	26	10	25	31
13	2	59	9	53	8	45	2	29	26	22	25	44
14	3	13	10	6	8	57	2	40	26	34	25	57
15	3	27	10	19	9	9	2	52	26	46	26	9
16	3	40	10	32	9	21	3	3	26	58	26	22
17	3	54	10	45	9	32	3	15	27	9	26	35
18	4	8	10	57	9	44	3	26	27	21	26	48
19	4	22	11	10	9	56	3	38	27	33	27	1
20	4	35	11	23	10	8	3	49	27	45	27	14
21	4	49	11	36	10	20	4	1	27	57	27	27
22	5	3	11	49	10	32	4	12	28	9	27	39
23	5	17	12	2	10	44	4	24	28	20	27	52
24	5	30	12	15	10	56	4	35	28	32	28	5
25	5	44	12	27	11	8	4	46	28	44	28	18
26	5	58	12	40	11	20	4	58	28	55	28	31
27	6	12	12	53	11	32	5	9	29	7	28	44
28	6	25	13	6	11	43	5	21	29	19	28	57
29	6	39	13	19	11	55	5	32	26	31	29	10

Tabula

Tabula Domorum Cœleſtium ad eleuationem Poli grad. 44. minut. 29'.

Horæ 6. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♋		♌		♍		♎		♎		♐	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
30	6	53	13	32	12	7	5	44	29	43	29	23
31	7	7	13	45	12	19	5	55	29	54	29	36
32	7	20	13	58	12	31	6	7	0 ♏	6	29 ♑	49
33	7	34	14	11	12	43	6	18	0	18	0	2
34	7	48	14	24	12	54	6	30	0	30	0	15
35	8	2	14	37	13	6	6	41	0	42	0	27
36	8	16	14	50	13	18	6	52	0	54	0	40
37	8	30	15	3	13	30	7	4	1	5	0	53
38	8	44	15	17	13	42	7	15	1	17	1	6
39	8	58	15	30	13	54	7	27	1	29	1	19
40	9	11	15	43	14	6	7	38	1	41	1	32
41	9	25	15	56	14	17	7	49	1	51	1	45
42	9	39	16	9	14	29	8	1	2	4	1	57
43	9	53	16	22	14	41	8	12	2	16	2	10
44	10	6	16	35	14	53	8	24	2	28	2	23
45	10	20	16	48	15	5	8	35	2	39	2	36
46	10	34	17	1	15	17	8	47	2	51	2	49
47	10	48	17	14	15	29	8	58	3	3	3	2
48	11	2	17	27	15	41	9	10	3	15	3	15
49	11	16	17	40	15	53	9	22	3	27	3	28
50	11	30	17	53	16	5	9	33	3	39	3	41
51	11	44	18	6	16	17	9	45	3	51	3	54
52	11	57	18	19	16	29	9	56	4	2	4	7
53	12	11	18	32	16	41	10	8	4	14	4	20
54	12	25	18	45	16	53	10	19	4	26	4	33
55	12	39	18	48	17	5	10	30	4	38	4	46
56	12	53	19	11	17	17	10	42	4	50	4	59
57	13	6	19	24	17	28	10	53	5	2	5	12
58	13	20	19	37	17	40	11	5	5	13	5	25
59	13	34	19	50	17	52	11	16	5	25	5	38

Horæ 7. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♋		♌		♍		♎		♏		♐	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
0	13	48	20	3	18	4	11	28	5	37	5	51
1	14	2	20	17	18	16	11	39	5	48	6	4
2	14	16	20	30	18	28	11	51	6	0	6	17
3	14	30	20	43	18	39	12	2	6	12	6	30
4	14	44	20	56	18	51	12	14	6	23	6	43
5	14	58	21	9	19	3	12	25	6	35	6	56
6	15	12	21	22	19	15	12	36	6	47	7	9
7	15	26	21	35	19	27	12	47	6	58	7	22
8	15	40	21	48	19	39	12	59	7	10	7	35
9	15	54	22	1	19	51	13	10	7	22	7	48
10	16	8	22	14	20	3	13	22	7	34	8	1
11	16	22	22	27	20	15	13	33	7	45	8	14
12	16	36	22	40	20	27	13	45	7	57	8	27
13	16	40	22	53	20	39	13	56	8	9	8	40
14	17	3	23	6	20	51	14	8	8	21	8	53
15	17	17	23	19	21	2	14	19	8	32	9	6
16	17	31	23	32	21	14	14	30	8	44	9	19
17	17	45	23	45	21	26	14	42	8	56	9	32
18	17	59	23	58	21	38	14	53	9	8	9	45
19	18	13	24	11	21	50	15	5	9	19	9	57
20	18	27	24	24	22	2	15	16	9	31	10	10
21	18	41	24	37	22	14	15	28	9	43	10	23
22	18	55	24	50	22	26	15	39	9	55	10	36
23	19	9	25	4	22	38	15	51	10	6	10	50
24	19	23	25	17	22	50	16	3	10	18	11	3
25	19	37	25	30	23	2	16	14	10	30	11	16
26	19	51	25	43	23	14	16	26	10	41	11	29
27	20	5	25	56	23	26	16	37	10	53	11	42
28	20	20	26	10	23	38	16	48	11	5	11	55
29	20	34	26	23	23	50	16	59	11	17	12	8

Tabula

Horæ 7. Aſcenſionis rectæ medij Cęli.

	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♋		♌		♍		♎		♏		♐	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
30	20	48	26	36	24	2	17	10	11	28	12	21
31	21	2	26	49	24	14	17	21	11	40	12	34
32	21	16	27	3	24	26	17	33	11	52	12	48
33	21	30	27	16	24	38	17	44	12	4	13	1
34	21	44	27	29	24	50	17	55	12	16	13	14
35	21	58	27	42	25	2	18	7	12	27	13	27
36	22	12	27	56	25	14	18	18	12	39	13	40
37	22	26	28	9	25	26	18	30	12	51	13	53
38	22	40	28	22	25	38	18	41	13	2	14	6
39	22	54	28	35	25	52	18	52	13	14	14	19
40	23	9	28	48	26	2	19	4	13	26	14	32
41	23	23	29	1	26	13	19	15	13	38	14	45
42	23	37	29	14	26	25	19	27	13	50	14	58
43	23	51	29	27	26	37	19	38	14	2	15	11
44	24	6	29	41	26	49	19	50	14	13	15	25
45	24	20	29	51	27	1	20	2	14	25	15	38
46	24	34	0 ♍	7	27	13	20	13	14	37	15	51
47	24	48	0	20	27	25	20	24	14	48	16	4
48	25	3	0	34	27	37	20	36	14	0	16	17
49	25	17	0	47	27	49	20	47	15	12	16	30
50	25	31	1	0	28	1	20	58	15	24	16	43
51	25	45	1	13	28	13	21	10	15	36	16	57
52	25	59	1	26	28	24	21	21	15	47	17	10
53	26	13	1	40	28	36	21	33	15	59	17	23
54	26	27	1	53	28	48	21	44	16	11	17	36
55	26	41	2	6	29	0	21	55	16	23	17	49
56	26	56	2	19	29	12	22	7	16	35	18	3
57	27	10	2	33	29	24	22	18	16	47	18	16
58	27	24	2	36	29	26	22	30	16	58	18	29
59	27	38	2	48	29	15	22	41	17	10	18	42

Tabu-

Horæ 8. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♋ G	M	Vndeci. ♍ G	M	Duodec. ♎ G	M	Horoſcopi ♎ G	M	Secundæ ♏ G	M	Tertiæ ♐ G	M
0	27	53	3	12	0	0	22	52	17	22	18.	56
1	28	7	3	26	0	12	23	4	17	34	19	9
2	28	21	3	39	0	24	23	51	17	45	19	22
3	28	36	3	52	0	36	23	27	17	57	19	35
4	28	51	4	5	0	48	23	38	18	9	19	48
5	29	5	4	19	1	0	23	49	18	20	20	2
6	29	19	4	32	1	12	24	1	18	32	20	15
7	29	34	4	45	1	24	24	12	18	44	20	28
8	29	49	4	58	1	36	24	23	18	55	20	41
9	0 ♌	2	5	11	1	47	24	35	19	7	20	55
10	0	16	5	25	1	59	24	46	19	19	21	8
11	0	30	5	38	2	11	24	57	19	30	21	21
12	0	45	5	51	2	23	25	8	19	42	21	35
13	1	0	6	4	2	35	25	20	19	54	21	48
14	1	15	6	18	2	47	25	31	20	6	22	1
15	1	29	6	31	2	59	25	43	20	17	22	15
16	1	44	6	44	3	11	25	54	20	29	22	28
17	1	58	6	57	3	23	26	15	20	41	22	42
18	2	13	7	11	3	35	26	17	20	53	22	56
19	2	27	7	31	3	47	26	28	21	5	23	9
20	2	42	7	37	3	58	26	39	21	17	23	22
21	2	56	7	50	4	10	26	50	21	28	23	36
22	3	11	8	4	4	22	27	2	21	40	23	49
23	3	25	8	17	4	34	27	13	21	52	24	3
24	3	40	8	30	4	46	27	24	22	4	24	16
25	3	55	8	43	4	58	27	36	22	16	24	30
26	4	9	8	56	5	10	27	47	22	28	24	43
27	4	24	9	10	5	22	27	58	22	39	24	56
28	4	39	9	23	5	34	28	10	22	10	25	10
29	4	53	9	37	5	46	28	21	23	21	25	24

Tabu-

Horæ 8. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♌ G	M	Vndec. ♍ G	M	Duodec. ♎ G	M	Horoſcopi ♎ G	M	Secundæ ♏ G	M	Tertiæ ♐ G	M
30	5	8	9	50	5	58	28	32	23	15	25	37
31	5	22	10	4	6	10	28	44	23	27	25	51
32	5	37	10	17	6	22	28	55	23	39	26	5
33	5	51	10	30	6	34	29	6	23	51	26	18
34	6	6	10	44	6	46	29	17	24	2	26	32
35	6	20	10	57	6	58	29	29	24	14	26	45
36	6	35	11	11	7	10	29	40	24	26	26	59
37	6	49	11	24	7	22	29	52	24	37	27	13
							♏					
38	7	4	11	38	7	34	0	3	24	49	27	26
39	7	19	11	51	7	46	0	14	25	1	27	40
40	7	34	12	4	7	58	0	25	25	13	27	54
41	7	48	12	18	8	10	0	36	25	24	28	7
42	8	3	12	31	8	22	0	48	25	36	28	21
43	8	18	12	44	8	34	0	59	25	48	28	34
44	8	33	12	57	8	46	1	11	26	0	28	47
45	8	47	13	11	8	58	1	23	26	12	29	1
46	9	2	13	24	9	9	1	34	26	24	29	15
47	9	17	13	38	9	21	1	45	26	36	29	28
48	9	32	13	51	9	33	1	56	26	47	29	42
49	9	47	14	4	9	45	2	8	26	59	29	55
											♑	
50	10	2	14	18	9	57	2	19	27	11	0	23
51	10	17	14	31	10	9	2	30	27	23	0	9
52	10	32	14	45	10	21	2	42	27	35	0	36
53	10	46	14	58	10	33	2	53	27	47	0	50
54	11	1	15	12	10	45	3	4	27	58	1	4
55	11	16	15	25	10	57	3	15	28	10	1	18
56	11	31	15	39	11	9	3	27	28	22	1	31
57	11	46	15	52	11	21	3	38	28	34	1	45
58	12	1	16	5	11	32	3	49	28	46	1	59
59	12	16	16	19	11	44	4	2	28	58	2	13

Tabula

Horæ 9. Aſcenſionis rectæ medij Cœli.												
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♌		♍		♎		♏		♏		♑	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
0	12	31	16	32	11	56	4	13	29	10	2	28
1	12	46	16	46	12	8	4	24	29	22	2	41
2	13	1	16	59	12	20	4	36	29	34	2	55
3	13	16	17	13	12	32	4	47	29	46	3	9
4	13	31	17	26	12	43	4	58	29	58	3	23
5	13	46	17	39	12	55	5	10	0 ♐	10	3	37
6	14	1	17	53	13	7	5	21	0	22	3	52
7	14	16	18	6	13	19	5	33	0	34	4	2
8	14	31	18	20	13	31	5	44	0	46	4	20
9	14	46	18	33	13	43	5	56	0	58	4	34
10	15	1	18	47	13	55	6	6	1	9	4	48
11	15	16	19	0	14	7	6	17	1	21	5	2
12	15	31	19	13	14	19	6	29	1	33	5	16
13	15	46	19	27	14	31	6	40	1	45	5	30
14	16	1	19	40	14	43	6	52	1	57	5	44
15	16	16	19	54	14	55	7	3	2	9	5	58
16	16	32	20	7	15	7	7	14	2	21	6	12
17	16	46	20	21	15	19	7	25	2	33	6	26
18	17	2	20	34	15	31	7	36	2	45	6	40
19	17	17	20	47	15	43	7	48	2	57	6	54
20	17	33	21	1	15	54	7	59	3	9	7	9
21	17	48	21	14	16	6	8	11	3	21	7	23
22	18	3	21	28	16	18	8	22	3	33	7	37
23	18	18	21	41	16	30	8	33	3	45	7	51
24	18	33	21	55	16	42	8	44	3	58	8	6
25	18	48	22	8	16	54	8	56	4	10	8	20
26	19	3	22	21	17	6	9	7	4	22	8	34
27	19	19	22	25	17	17	9	18	4	34	8	49
28	19	34	22	48	17	29	9	29	4	46	9	3
29	19	49	23	2	17	41	9	41	4	58	9	17

Horæ 9. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♌ G	M	Vndec. ♍ G	M	Duodec. ♎ G	M	Horoſc. ♏ G	M	Secundæ ♐ G	M	Tertiæ ♑ G	M
30	20	5	23	15	17	53	9	52	5	10	9	32
31	20	20	23	29	18	5	10	3	5	22	9	46
32	20	35	23	42	18	17	10	14	5	34	10	1
33	20	51	23	56	18	28	10	26	5	46	10	15
34	21	6	24	9	18	40	10	37	5	58	10	30
35	21	22	24	23	18	52	10	49	6	11	10	45
36	21	37	24	36	19	4	11	0	6	23	10	59
37	21	52	24	50	19	16	11	11	6	35	11	14
38	22	7	25	4	19	28	11	23	6	48	11	28
39	22	23	25	17	19	40	11	34	7	0	11	43
40	22	38	25	30	19	52	11	46	7	12	11	57
41	22	53	25	44	20	4	11	57	7	24	12	12
42	23	8	25	57	20	16	12	8	7	36	12	26
43	23	23	26	11	20	28	12	20	7	48	12	41
44	23	39	26	24	20	39	12	31	8	0	12	55
45	23	54	26	38	20	51	12	42	8	12	13	10
46	24	10	26	51	21	3	12	53	8	25	13	25
47	24	26	27	5	21	15	13	5	8	37	13	39
48	24	41	27	18	21	27	13	16	8	49	13	54
49	24	57	27	32	21	39	13	27	9	2	14	9
50	25	12	27	45	21	51	13	39	9	14	14	24
51	25	28	27	59	22	2	13	50	9	26	14	38
52	25	43	28	13	22	14	14	2	9	38	14	53
53	25	59	28	26	22	26	14	13	9	50	15	8
54	26	15	28	39	22	38	14	24	10	2	15	23
55	26	30	28	53	22	50	14	35	10	15	15	38
56	26	46	29	6	23	2	14	47	10	27	15	53
57	27	1	29	20	23	13	14	58	10	39	16	8
58	27	17	29	33	23	25	15	9	10	52	16	23
59	27	33	29	47	23	37	15	21	11	4	16	37

Ta-

Minuta	Horæ 10. Aſcenſionis rectæ medij Cęli.											
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♌ G	M	♎ G	M	♎ G	M	♏ G	M	♐ G	M	♑ G	M
0	27	48	0	0	23	49	15	32	11	16	16	52
1	28	4	0	13	24	1	15	43	11	29	17	7
2	28	20	0	27	24	21	15	55	11	41	17	22
3	28	35	0	40	24	24	16	6	11	53	17	37
4	28	51	0	54	24	36	16	17	12	6	17	52
5	29	7	1	7	24	48	16	29	12	18	18	7
6	29	23	1	21	24	59	16	40	12	43	18	22
7	29	38	1	34	25	11	16	52	12	31	18	38
8	29	54	1	47	25	23	17	3	12	56	18	53
9	♍ 0	9	2	1	25	35	17	14	13	8	19	8
10	0	25	2	15	25	47	17	26	13	21	19	23
11	0	40	2	28	25	58	17	37	13	33	19	39
12	0	56	2	42	26	10	17	49	13	45	19	54
13	1	11	2	55	26	22	18	0	13	58	20	9
14	1	27	3	9	26	34	18	11	14	10	20	25
15	1	43	3	22	26	46	18	23	14	22	20	40
16	1	59	3	36	26	58	18	34	14	35	20	56
17	2	14	3	49	27	9	18	45	14	47	21	11
18	2	30	4	3	27	21	18	56	15	0	21	26
19	2	46	4	16	27	33	19	8	15	13	21	42
20	3	2	4	30	27	45	19	19	15	25	21	57
21	3	18	4	43	27	57	19	30	15	38	22	12
22	3	34	4	56	28	9	19	42	15	51	22	28
23	3	50	5	10	28	20	19	53	16	3	22	43
24	4	6	5	24	28	32	20	4	16	16	22	59
25	4	21	5	37	28	44	20	16	16	29	23	15
26	4	37	5	51	28	55	20	27	16	41	23	31
27	4	53	6	4	29	7	20	39	16	54	23	46
28	5	9	6	18	29	19	20	50	17	7	24	2
29	5	25	6	31	29	31	21	2	17	19	24	18

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Horæ 10. Aſcenſionis rectæ medij Celi.

Minuta	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♍		♎		♎		♏		♓		♑	
	G	M	G	M	G	M	G	M	G	M	G	M
30	5	41	6	45	29	43	21	13	17	32	24	34
31	5	57	6	58	29	54	21	24	17	44	24	49
32	6	13	7	12	0	6	21	36	17	57	25	5
33	6	29	7	25	0	18	21	47	18	9	25	21
34	6	45	7	39	0	30	21	58	18	22	25	37
35	7	1	7	52	0	42	22	10	18	35	25	53
36	7	17	8	5	0	54	22	21	18	48	26	8
37	7	33	8	19	1	5	22	32	19	1	26	24
38	7	49	8	32	1	17	22	43	19	14	26	40
39	8	5	8	46	1	29	22	54	19	27	26	56
40	8	21	8	59	1	41	23	7	19	39	27	12
41	8	37	9	13	1	52	23	18	19	52	27	28
42	8	53	9	26	2	4	23	30	20	5	27	44
43	9	9	9	39	2	16	23	42	20	18	28	0
44	9	25	9	53	2	28	23	53	20	31	28	16
45	9	41	10	6	2	39	24	5	20	44	28	32
46	9	57	10	20	2	51	24	16	20	57	28	48
47	10	13	10	33	3	3	24	27	21	10	29	4
48	10	29	10	47	3	15	24	38	21	23	29	21
49	10	45	11	0	3	27	24	50	21	36	29	37
50	11	1	11	13	3	39	25	1	21	49	29 ♒	53
51	11	17	11	27	3	51	25	12	22	2	0	10
52	11	33	11	40	4	2	25	24	22	15	0	26
53	11	50	11	54	4	14	25	35	22	28	0	43
54	12	6	12	7	4	26	25	47	22	51	0	59
55	12	22	12	21	4	38	25	58	22	54	1	15
56	12	38	12	34	4	50	26	10	23	7	1	32
57	12	54	12	47	5	2	26	21	23	20	1	48
58	13	11	13	1	5	13	26	33	23	33	2	4
59	13	27	13	14	5	25	26	44	23	46	2	21

Minuta	Decimæ ♍ G	M	Vndec. ♎ G	M	Duodec. ♏ G	M	Horoſcop. ♏ G	M	Secundæ ♐ G	M	Tertiæ ♒ G	M
	Horæ 11. Aſcenſionis rectæ medij Cęli.											
0	13	43	13	28	5	37	26	55	23	59	2	38
1	13	59	13	41	5	48	27	7	24	12	2	54
2	14	15	13	55	6	0	27	18	24	26	3	11
3	14	31	14	8	6	12	27	30	24	39	3	28
4	14	47	14	21	6	23	27	42	24	52	3	43
5	15	3	14	35	6	35	27	53	25	5	4	1
6	15	19	14	48	6	47	28	5	25	19	4	18
7	15	35	15	2	6	58	28	16	25	32	4	34
8	15	52	15	15	7	10	28	28	25	46	4	51
9	16	9	15	29	7	22	28	39	25	59	5	8
10	16	25	15	42	7	34	28	51	26	13	5	24
11	16	41	15	56	7	45	29	2	26	26	5	31
12	16	57	16	5	7	57	29	14	26	39	5	58
13	17	14	16	22	8	9	29	26	26	53	6	15
14	17	30	16	36	8	21	29	37	27	6	6	32
15	17	46	16	49	8	32	29	49	27	20	6	49
16	18	2	17	3	8	44	♐ 0	1	27	34	7	6
17	18	18	17	16	8	56	0	12	27	47	7	23
18	18	34	17	29	9	8	0	24	28	1	7	40
19	18	51	17	42	9	19	0	35	28	14	7	57
20	19	7	17	56	9	31	0	46	28	28	8	14
21	19	24	18	9	9	43	0	58	28	41	8	31
22	19	40	18	22	9	55	1	9	28	55	8	48
23	19	56	18	36	10	6	1	21	29	8	9	6
24	20	12	18	49	10	18	1	33	29	22	9	24
25	20	27	19	3	10	30	1	44	29	35	9	41
26	20	44	19	16	10	41	1	56	29	49	9	59
27	21	1	19	30	10	53	2	8	♑ 0	3	10	16
28	21	17	19	43	11	5	2	19	0	16	10	33
29	21	33	19	56	11	17	2	31	0	30	10	51

Horæ 11. Aſcenſionis rectæ medij Celi.

Minuta

	Decimæ ♍ G	M	Vndec. ♎ G	M	Duodec. ♏ G	M	Horoſcop. ♐ G	M	Secundæ ♑ G	M	Tertiæ ♒ G	M
30	21	49	20	10	11	28	2	42	0	44	11	8
31	22	6	20	23	11	40	2	54	0	58	11	25
32	22	22	20	37	11	52	3	6	1	12	11	43
33	22	38	20	50	12	4	3	17	1	26	12	0
34	22	55	21	4	12	16	3	29	1	40	12	18
35	23	11	21	17	12	27	3	41	1	53	12	36
36	23	27	21	30	12	39	3	53	2	7	12	54
37	23	44	21	43	12	51	4	5	2	21	13	12
38	24	0	21	56	13	2	4	17	2	35	13	29
39	24	16	22	10	13	14	4	28	2	49	13	47
40	24	33	22	23	13	26	4	40	3	3	14	5
41	24	48	22	36	13	38	4	52	3	17	14	22
42	25	6	22	49	13	50	5	4	3	31	14	40
43	25	22	23	3	14	2	5	16	3	46	14	58
44	25	38	23	16	14	13	5	27	4	0	15	16
45	25	55	23	29	14	25	5	39	4	14	15	34
46	26	11	23	42	14	37	5	51	4	29	15	52
47	26	27	23	56	14	48	6	2	4	43	16	10
48	26	44	24	9	15	0	6	14	4	57	16	28
49	27	0	24	22	15	12	6	26	5	11	16	46
50	27	16	24	53	15	24	6	38	5	25	17	4
51	27	33	24	6	15	36	6	50	5	39	17	22
52	27	49	25	2	15	24	7	2	6	53	17	40
53	28	5	25	15	15	36	7	14	6	8	17	59
54	28	22	25	28	16	11	7	26	6	23	18	17
55	28	38	25	41	16	23	7	38	6	37	18	36
56	28	55	25	55	16	35	7	50	6	52	18	54
57	29	11	26	8	16	47	8	2	7	7	19	12
58	29	27	26	21	16	58	8	14	7	22	19	31
59	29	44	26	34	17	10	8	26	7	36	19	49

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Minuta	Horæ 12. Aſcenſionis rectæ medij Cœli.											
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♎		♎		♏		♐		♑		♒	
	G	M	G	M	G	M	G	M	G	M	G	M
0	0	0	26	48	17	22	8	37	7	51	20	7
1	0	16	27	1	17	34	8	49	8	6	20	26
2	0	33	27	14	17	45	9	1	8	21	20	44
3	0	49	27	27	17	34	9	13	8	35	21	2
4	1	5	27	41	18	9	9	25	8	50	21	21
5	1	22	27	54	18	20	9	37	9	5	21	39
6	1	38	28	7	18	32	9	49	9	20	21	58
7	1	55	28	20	18	44	10	1	9	35	22	17
8	2	11	28	34	18	55	10	13	9	50	22	36
9	2	27	28	47	19	7	10	25	10	5	22	55
10	2	44	29	0	19	19	10	37	10	20	23	13
11	3	0	29	13	19	30	10	49	10	35	23	32
12	3	16	29	26	19	42	11	1	10	50	23	50
13	3	33	29	40	19	54	11	13	11	5	24	9
14	3	49	29 ♏	53	20	6	11	25	11	20	24	28
15	4	5	0	6	20	17	11	37	11	35	24	47
16	4	22	0	19	20	29	11	49	11	50	25	6
17	4	38	0	33	20	41	12	2	12	5	25	25
18	4	54	0	46	20	53	12	14	12	21	25	44
19	5	11	0	59	21	5	12	26	12	36	26	2
20	5	27	1	12	21	17	12	38	12	52	26	21
21	5	44	1	25	21	28	12	50	13	7	26	40
22	6	0	1	38	21	40	13	2	13	22	26	59
23	6	16	1	51	21	52	13	15	13	38	27	18
24	6	33	2	4	22	4	13	27	13	53	27	38
25	6	49	2	18	22	16	13	39	14	8	27	57
26	7	5	2	31	22	28	13	51	14	24	28	17
27	7	22	2	44	22	39	14	3	14	40	28	36
28	7	38	2	57	22	51	14	15	14	56	28	55
29	7	54	3	11	23	3	14	28	15	11	29	14

Tabu-

	Horæ 12. Aſcenſionis rectæ medij Celi.											
	Decimæ		Vndec.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♎		♏		♏		♐		♑		♒	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
30	8	21	3	24	23	15	14	40	15	27	29	34
31	8	27	3	37	23	27	[illegible]	52	15	42	29	53
											♓	
32	8	43	3	50	23	[illegible]	[illegible]	4	15	58	0	13
33	9	0	4	4	23	[illegible]	[illegible]	17	16	14	0	33
34	9	16	4	17	24	2	15	29	16	29	0	52
35	9	32	4	30	[illegible]	14	15	42	16	45	1	12
36	9	48	4	43	24	26	15	54	17	1	1	31
37	10	4	4	56	24	37	16	7	17	17	1	51
38	10	20	5	10	24	49	16	19	17	33	2	10
39	10	36	5	23	25	1	16	32	17	49	2	30
40	10	53	5	36	25	13	16	44	18	5	2	50
41	11	9	5	49	25	24	16	57	18	22	3	9
42	11	26	6	2	25	36	17	9	18	38	3	29
43	11	42	6	15	25	48	17	21	18	55	3	48
44	11	58	6	28	26	0	17	34	19	11	4	8
45	12	14	6	41	26	12	17	46	19	27	4	27
46	12	31	6	54	26	24	17	58	19	44	4	47
47	12	46	7	7	26	36	18	11	20	0	5	6
48	13	3	7	20	26	47	18	23	20	17	5	25
49	13	19	7	33	26	59	18	36	20	33	5	44
50	13	35	7	46	27	11	18	48	20	51	6	5
51	13	52	7	59	27	23	19	1	21	7	6	25
52	14	8	8	12	27	35	19	14	21	23	6	44
53	14	25	8	25	27	47	19	27	21	39	7	4
54	14	41	8	38	27	58	19	39	21	56	7	25
55	14	57	8	41	28	10	19	52	22	12	7	45
56	15	13	9	4	28	22	20	5	22	29	8	6
57	15	29	9	17	28	34	20	18	22	46	8	26
58	15	45	9	30	28	46	20	30	23	3	8	46
59	16	0	9	43	28	58	20	43	23	20	9	7

Ta

Horæ 13. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♎		♏		♏		♐		♑		♓	
	G	M	G	M	G	M	G	M	G	M	G	M
0	16	17	9	57	29	10	20	55	23	37	9	27
1	16	33	10	10	29	22	21	8	23	54	9	47
2	16	49	10	23	29	34	21	21	24	12	10	7
3	17	6	10	36	29	46	21	34	24	29	10	27
4	17	22	10	49	29	58	21	47	24	46	10	47
5	17	36	11	2	♐ 0	10	22	0	25	3	11	7
6	17	54	11	15	0	22	22	13	25	21	11	27
7	18	10	11	28	0	34	22	26	25	39	11	47
8	18	27	11	41	0	46	22	39	25	56	12	7
9	18	43	11	54	0	58	22	51	26	14	12	27
10	18	59	12	7	1	9	23	4	26	31	12	48
11	19	15	12	20	1	21	23	17	26	48	13	8
12	19	31	12	33	1	33	23	30	27	6	13	28
13	19	47	12	46	1	45	23	43	27	24	13	48
14	20	3	12	59	1	57	23	57	27	41	14	8
15	20	19	13	12	2	9	24	10	27	59	14	29
16	20	35	13	25	2	21	24	23	28	17	14	50
17	20	51	13	38	2	32	24	36	28	35	15	11
18	21	7	13	51	2	45	24	49	28	53	15	31
19	21	23	14	4	2	58	25	3	29	11	15	51
20	21	39	14	17	3	9	25	16	29	29	16	11
21	22	55	14	30	3	21	25	29	29	47	16	32
22	22	55	14	43	3	33	25	42	♒ 0	5	16	53
23	22	9	14	57	3	45	25	56	0	23	17	14
24	22	43	15	10	3	58	26	9	0	42	17	34
25	22	59	15	23	4	10	26	32	1	0	17	55
26	23	15	15	36	4	22	26	36	1	18	18	15
27	23	31	15	49	4	34	26	49	1	37	18	35
28	23	47	16	2	4	46	27	3	1	55	18	56
29	24	3	16	15	4	58	27	16	2	14	19	17

Tabula

Horæ 13. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♎		♏		♐		♐		♒		♓	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
30	24	19	16	28	5	10	27	30	2	32	19	38
31	24	35	16	41	5	22	27	43	2	51	19	58
32	24	51	16	54	5	34	27	56	3	10	20	19
33	25	7	17	7	5	46	28	10	3	29	20	39
34	25	23	17	20	5	58	28	23	3	47	21	0
35	25	39	17	33	6	11	28	37	4	6	21	21
36	25	54	17	45	6	23	28	50	4	25	21	41
37	26	10	17	58	6	35	29	4	4	44	22	2
38	26	26	18	11	6	48	29	17	5	3	22	23
39	26	42	18	24	7	0	29	31	5	22	22	44
40	26	58	18	37	7	12	29	45	5	41	23	4
41	27	14	18	50	7	24	29 ♑	58	6	0	23	25
42	27	30	19	3	7	36	0	12	6	20	23	45
43	27	46	19	15	7	48	0	25	6	39	24	6
44	28	1	19	28	8	0	0	39	6	59	24	27
45	28	17	19	41	8	12	0	53	7	18	24	48
46	28	33	19	54	8	25	1	6	7	38	25	9
47	28	49	20	7	8	37	1	20	7	57	25	30
48	29	4	20	20	8	49	1	34	8	17	25	50
49	29	20	20	33	9	2	1	48	8	37	26	11
50	29	35	20	46	9	14	2	2	8	56	26	32
51	29 ♏	51	20	59	9	26	2	16	9	16	26	52
52	0	6	21	12	9	38	2	30	9	37	27	13
53	0	22	21	25	9	50	2	45	9	57	27	34
54	0	37	21	38	10	2	2	59	10	17	27	55
55	0	53	21	41	10	15	3	13	10	37	28	15
56	1	9	22	4	10	27	3	28	10	57	28	36
57	1	25	22	17	10	39	3	42	11	18	28	57
58	1	40	22	30	10	52	3	56	11	38	29	18
59	1	56	22	43	11	4	4	11	11	59	29	39

Tabu-

Minuta	Decimæ		Vndeci.		Duodec.		Horoſc.		Secundæ		Tertiæ	
Hora 14. Aſcenſionis rectæ medij Cœli.												
	♏		♏		♐		♑		♒		♈	
	G	M	G	M	G	M	G	M	G	M	G	M
0	2	12	22	56	11	16	4	25	12	19	0	0
1	2	27	23	9	11	29	4	40	12	40	0	21
2	2	43	23	22	11	41	4	54	13	0	0	42
3	2	59	23	35	11	53	5	9	13	20	1	3
4	3	14	23	48	12	6	5	23	13	41	1	24
5	3	30	24	1	12	18	5	37	14	1	1	45
6	3	45	24	14	12	31	5	51	14	22	2	5
7	4	1	24	27	12	43	6	5	14	42	2	26
8	4	17	24	39	12	56	6	20	15	3	2	47
9	4	32	24	52	13	8	6	34	15	24	3	8
10	4	48	25	5	13	21	6	49	15	45	3	28
11	5	3	25	18	13	33	7	4	16	6	3	49
12	5	19	25	31	13	45	7	19	16	27	4	10
13	5	34	25	44	13	58	7	34	16	49	4	30
14	5	50	25	57	14	10	7	49	17	10	4	51
15	6	6	26	9	14	22	8	4	17	32	5	12
16	6	21	26	22	14	35	8	19	17	54	5	33
17	6	37	26	35	14	47	8	33	18	16	5	54
18	6	52	26	48	15	0	8	48	18	37	6	15
19	7	7	27	1	15	13	9	3	18	58	6	35
20	7	22	27	14	15	25	9	18	19	20	6	56
21	7	37	27	27	15	38	9	34	19	42	7	16
22	7	53	27	39	15	51	9	49	20	4	7	37
23	8	8	27	52	16	3	10	5	20	26	7	58
24	8	23	28	5	16	16	10	20	20	48	8	19
25	8	38	28	18	16	29	10	35	21	10	8	39
26	8	54	28	31	16	41	10	50	21	31	9	0
27	9	9	28	44	16	54	11	5	21	53	9	21
28	9	25	28	57	17	7	11	21	22	15	9	41
29	9	40	29	10	17	19	11	36	22	37	10	2

Tabu-

Horæ 14. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♏ G	M	Vndec. ♏ G	M	Duodec. ♐ G	M	Horoſco. ♑ G	M	Secundæ ♒ G	M	Tertiæ ♈ G	M
30	9	55	29	23	17	32	11	52	23	0	10	22
31	10	11	29	36	17	44	12	7	23	22	10	43
32	10	26	29	♐ 49	17	57	12	23	23	45	11	4
33	10	41	0	2	18	9	12	39	24	8	11	25
34	10	57	0	15	18	22	12	55	24	31	11	45
35	11	12	0	27	18	35	13	11	24	54	12	5
36	11	27	0	40	18	48	13	26	25	16	12	26
37	11	42	0	53	19	1	13	42	25	39	12	46
38	11	57	1	6	19	14	13	58	26	2	13	7
39	12	12	1	19	19	27	14	14	26	25	13	28
40	12	27	1	32	19	39	14	29	26	48	13	49
41	12	43	1	45	19	52	14	45	27	11	14	9
42	12	58	1	57	20	5	15	1	27	34	14	29
43	13	13	2	10	20	18	15	17	27	57	14	49
44	13	28	2	23	20	31	15	33	28	20	15	10
45	13	44	2	36	20	44	15	49	28	43	15	31
46	13	59	2	49	20	57	16	5	29	6	15	52
47	14	14	3	2	21	10	16	21	29	30	16	12
48	14	29	3	15	21	23	16	37	29	54	16	32
49	14	44	3	28	21	31	16	54	♓ 0	17	16	52
50	14	59	3	41	21	49	17	10	0	41	17	12
51	15	14	3	54	22	2	17	27	1	5	17	33
52	15	29	4	7	22	15	17	43	1	30	17	53
53	15	44	4	20	22	28	18	0	1	54	18	13
54	15	59	4	33	22	41	18	17	2	17	18	33
55	16	14	4	46	22	54	18	33	2	41	18	53
56	16	29	4	59	23	7	18	50	3	5	19	13
57	16	44	5	12	23	20	19	7	3	52	19	33
58	16	59	5	25	23	33	19	24	3	52	19	53
59	17	14	5	38	23	46	19	41	4	16	19	13

Minuta	Horæ 15.	Aſcenſionis	rectæ	medij	Cęli.							
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♏ G	M	♐ G	M	♐ G	M	♑ G	M	♓ G	M	♈ G	M
0	17	29	5	51	23	59	19	58	4	39	20	33
1	17	44	6	4	24	12	20	15	5	3	20	53
2	17	59	6	17	24	26	20	32	5	28	21	14
3	18	14	6	30	24	39	20	49	5	52	21	34
4	18	29	6	43	24	52	21	6	6	16	21	54
5	18	44	6	56	25	5	21	24	6	39	22	15
6	18	59	7	9	25	19	21	42	7	3	22	58
7	19	14	7	22	25	32	22	0	7	28	22	17
8	19	28	7	35	25	46	22	17	7	53	23	16
9	19	43	7	48	25	59	22	33	8	18	23	35
10	19	58	8	1	26	13	22	50	8	43	23	55
11	20	13	8	14	26	26	23	7	9	8	24	16
12	20	28	8	27	26	39	23	25	9	33	24	35
13	20	43	8	40	26	53	23	42	9	58	24	55
14	20	58	8	53	27	6	24	0	10	23	25	13
15	21	13	9	6	27	20	24	28	10	47	25	33
16	21	27	9	19	27	34	24	37	11	12	25	52
17	21	42	9	32	27	47	24	55	11	37	26	12
18	21	57	9	45	28	1	25	13	12	2	26	31
19	22	12	9	57	28	14	25	31	12	27	26	51
20	22	26	10	10	28	28	25	49	12	52	27	10
21	22	41	10	23	28	41	26	7	13	17	27	30
22	22	56	10	36	28	55	26	25	13	42	27	50
23	23	11	10	50	29	8	26	43	14	7	28	9
24	23	25	11	3	29	22	27	1	14	33	28	29
25	23	40	11	16	29	45	27	20	14	58	28	48
26	23	54	11	29	29 ♑	49	27	39	15	23	29	8
27	24	9	11	42	0	3	27	57	15	48	29	27
28	24	23	11	55	0	16	28	16	16	14	29	47
29	24	38	12	8	0	30	28	34	16	39	0	7

Tabu-

Horæ 15. Aſcenſionis rectæ medij Cęli.

Minuta

	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♒		♓		♑		♑		♈		♉	
	G	M	G	M	G	M	G	M	G	M	G	M
30	24	52	12	21	0	44	28	53	17	5	0	26
31	25	7	12	34	0	58	29	12	17	31	0	46
32	25	21	12	48	1	12	29	31	17	57	1	5
33	25	36	13	1	1	26	29	50	18	22	1	24
							♒					
34	25	51	13	14	1	40	0	9	18	48	1	43
35	26	5	13	27	1	53	0	28	19	14	2	3
36	26	20	13	40	2	7	0	47	19	39	2	22
37	26	35	13	53	2	21	1	7	20	5	2	42
38	26	49	14	6	2	35	1	26	20	30	3	1
39	27	4	14	19	2	49	1	46	20	55	3	20
40	27	18	14	32	3	3	2	5	21	21	3	39
41	27	33	14	45	3	17	2	25	21	46	3	58
42	27	47	14	58	3	31	2	44	22	12	4	16
43	28	2	15	11	3	46	3	4	22	39	4	35
44	28	16	15	25	4	0	3	24	23	5	4	54
45	28	31	15	38	4	14	3	44	23	31	5	13
46	28	45	15	51	4	29	4	4	23	57	5	32
47	29	0	16	4	4	43	4	24	24	2	5	51
48	29	15	16	17	4	57	4	43	24	48	6	10
49	29	30	16	30	5	11	5	3	25	14	6	28
50	29	44	16	43	5	25	5	23	25	39	6	47
51	29	58	16	57	5	39	5	44	26	5	7	5
	♓											
52	0	11	17	10	5	53	6	4	26	32	7	24
53	0	26	17	23	6	8	6	25	26	58	7	43
54	0	41	17	36	6	23	6	45	27	24	8	2
55	0	55	17	49	6	37	7	6	27	49	8	21
56	1	9	18	3	6	52	7	27	28	16	8	39
57	1	24	18	16	7	7	7	48	28	42	8	58
58	1	39	18	29	7	22	8	9	29	8	9	16
59	1	53	18	42	7	36	8	29	29	34	9	34

Horę 16. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndeci.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♐		♐		♑		♒		♈		♉	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
0	2	7	18	56	7	51	8	50	0	0	9	53
1	2	22	19	9	8	6	9	12	0	26	10	11
2	2	36	19	22	8	21	9	33	0	52	10	29
3	2	50	19	35	8	35	9	54	1	18	10	48
4	3	4	19	48	8	50	10	15	1	44	11	6
5	3	19	20	2	9	5	10	36	2	11	11	24
6	3	33	20	15	9	20	10	57	2	36	11	43
7	3	47	20	28	9	35	11	19	3	2	12	1
8	4	1	20	41	9	50	11	41	3	28	12	20
9	4	15	20	55	10	5	12	3	3	55	12	38
10	4	29	21	8	10	20	12	25	4	21	12	56
11	4	43	21	21	10	35	12	47	4	46	13	14
12	4	57	21	35	10	50	13	9	5	12	13	32
13	5	11	21	48	11	5	13	31	5	38	13	50
14	5	26	22	1	11	20	13	53	6	5	14	8
15	5	40	22	15	11	35	14	15	6	29	14	26
16	5	54	22	28	11	50	14	37	6	55	14	44
17	6	9	22	42	12	5	14	59	7	21	15	2
18	6	23	22	56	12	21	15	21	7	48	15	20
19	6	37	23	9	12	36	15	44	8	14	15	38
20	6	51	23	22	12	52	16	6	8	39	15	55
21	7	6	23	36	13	7	16	29	9	5	16	13
22	7	20	23	49	13	22	16	52	9	30	16	31
23	7	34	24	3	13	38	17	16	9	55	16	48
24	7	48	24	16	13	53	17	39	10	21	17	6
25	8	2	24	30	14	8	18	3	10	46	17	24
26	8	16	24	43	14	24	18	26	11	12	17	42
27	8	30	24	56	14	40	18	49	11	38	18	0
28	8	44	25	10	14	56	19	12	12	3	18	17
29	8	58	25	24	15	11	19	35	12	29	18	35

Tabu-

Horæ 16. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♓		♓		♑		♒		♈		♉	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
30	9	12	25	37	15	27	19	58	12	55	18	52
31	9	26	25	51	15	42	20	22	13	21	19	9
32	9	40	26	5	15	58	20	46	13	46	19	27
33	9	55	26	18	16	14	21	10	14	12	19	44
34	10	9	26	32	16	29	21	33	14	37	20	1
35	10	23	26	45	16	45	21	57	15	2	20	19
36	10	37	26	59	17	1	22	21	15	27	20	36
37	10	51	27	13	17	17	22	45	15	53	20	54
38	11	5	27	26	17	33	23	9	16	18	21	12
39	11	19	27	40	17	49	23	33	16	43	21	29
40	11	33	27	54	18	5	23	57	17	8	21	46
41	11	47	28	7	18	22	24	22	17	33	22	3
42	12	1	28	21	18	38	24	47	17	58	22	20
43	12	15	28	34	18	55	25	11	18	23	22	37
44	12	29	28	47	19	11	25	36	18	48	22	54
45	12	43	29	1	19	27	26	0	19	13	23	11
46	12	57	29	15	19	44	26	24	19	37	23	28
47	13	11	29	28	20	0	26	49	20	2	23	45
48	13	24	29	42	20	17	27	14	20	27	24	2
49	13	38	29	55	20	33	27	39	20	52	24	19
50	13	52	♑ 0	9	20	50	28	5	21	17	24	36
51	14	6	0	23	21	7	28	30	21	42	24	53
52	14	20	0	36	21	23	28	55	22	7	25	10
53	14	34	0	50	21	39	29	21	22	32	25	7
54	14	48	1	4	21	56	29 ♓	46	22	57	25	44
55	15	2	1	18	22	12	0	12	23	21	26	0
56	15	16	1	31	22	29	0	38	23	44	26	17
57	15	30	1	45	22	46	1	4	24	8	26	33
58	15	44	1	59	23	3	1	30	24	32	26	50
59	15	58	2	13	23	20	1	57	24	57	27	6

	Horæ 17. Aſcenſionis rectæ medij Cęli.											
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♐		♑		♑		♓		♈		♉	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
0	16	12	2	27	23	37	2	22	25	21	27	22
1	16	26	2	41	23	54	2	48	25	44	27	39
2	16	40	2	55	24	12	3	14	26	8	27	56
3	16	54	3	9	24	29	3	40	26	32	28	12
4	17	7	3	23	24	46	4	5	26	55	28	28
5	17	21	3	37	25	3	4	31	27	19	28	45
6	17	35	3	52	25	21	4	58	27	43	29	1
7	17	49	4	6	25	39	5	25	28	6	29	17
8	18	3	4	20	25	56	5	52	28	30	29	34
9	18	16	4	34	26	14	6	18	28	55	29	50
10	18	30	4	48	26	31	6	44	29	19	♊ 0	7
11	18	44	5	2	26	48	7	10	29	43	0	23
12	18	58	5	16	27	6	7	36	♉ 0	6	0	39
13	19	12	5	30	27	24	8	3	0	30	0	56
14	19	26	5	44	27	41	8	31	0	54	1	12
15	19	40	5	58	27	59	8	59	1	17	1	28
16	19	54	6	12	28	17	9	26	1	40	1	44
17	20	7	6	26	28	35	9	53	2	3	2	0
18	20	21	6	40	28	53	10	20	2	26	2	16
19	20	35	6	54	29	11	10	46	2	49	2	32
20	20	49	7	9	29	29	11	13	3	12	2	48
21	21	2	7	23	29	47	11	41	3	35	3	4
22	21	16	7	37	♒ 0	5	12	8	3	58	3	20
23	21	30	7	51	0	23	12	35	4	21	3	36
24	21	44	8	6	0	42	13	2	4	44	3	52
25	21	58	8	20	1	0	13	29	5	6	4	7
26	22	12	8	34	1	18	13	37	5	29	4	23
27	22	26	8	49	1	37	14	25	5	52	4	39
28	22	40	9	3	1	55	14	53	6	15	4	55
29	22	53	9	17	2	14	15	21	6	38	5	11

Horæ 19. Aſcenſionis rectæ medij Cęli.

Minuta

	Decimæ		Vndec.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♐		♑		♒		♓		♉		♊	
	G	M	G	M	G	M	G	M	G	M	G	M
30	23	7	9	32	2	32	15	51	7	0	5	26
31	23	21	9	45	2	51	16	17	7	23	5	42
32	23	35	10	1	3	10	16	45	7	45	5	58
33	23	48	10	15	3	29	17	14	8	7	6	14
34	24	2	10	30	3	47	17	42	8	29	6	29
35	24	16	10	45	4	6	18	10	8	50	6	45
36	24	30	10	59	4	25	18	38	9	12	7	1
37	24	43	11	14	4	44	19	6	9	34	7	17
38	24	57	11	28	5	3	19	34	9	56	7	32
39	25	11	11	43	5	22	20	2	10	18	7	48
40	25	25	11	57	5	41	20	30	10	40	8	3
41	25	38	12	12	6	0	20	58	11	2	8	18
42	25	52	12	26	6	20	21	26	11	23	8	34
43	26	6	12	41	6	39	21	54	11	44	8	49
44	26	20	12	55	6	59	22	23	12	6	9	4
45	26	33	13	10	7	18	22	51	12	28	9	20
46	26	47	13	25	7	38	23	20	12	50	9	35
47	27	1	13	39	7	57	23	49	13	11	9	51
48	27	15	13	54	8	17	24	17	13	33	10	6
49	27	28	14	9	8	37	24	45	13	54	10	21
50	27	42	14	24	8	56	25	14	14	15	10	37
51	27	56	14	38	9	16	25	43	14	35	10	52
52	28	10	14	53	9	37	26	12	14	57	11	7
53	28	23	15	8	9	57	26	40	15	18	11	22
54	28	37	15	23	10	17	27	8	15	38	11	38
55	28	51	15	38	10	37	27	37	15	59	11	53
56	29	5	15	53	10	57	28	6	16	19	12	8
57	29	18	16	8	11	18	28	34	16	40	12	23
58	29	32	16	23	11	38	29	2	17	0	12	38
59	29	46	16	37	11	59	29	31	17	20	12	53

Ta

Horæ 18. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♑		♑		♒		♈		♉		♊	
	G	M	G	M	G	M	G	M	G	M	G	M
0	0	0	16	52	12	19	0	0	17	41	13	8
1	0	14	17	7	12	40	0	29	18	1	13	23
2	0	28	17	22	13	0	0	58	18	22	13	37
3	0	42	17	37	13	20	1	26	18	42	13	52
4	0	55	17	52	13	41	1	55	19	3	14	7
5	1	9	18	7	14	1	2	23	19	23	14	22
6	1	23	18	22	14	22	2	52	29	43	14	37
7	1	37	18	38	14	42	3	20	20	3	14	52
8	1	50	18	53	15	3	3	49	20	33	15	7
9	2	4	19	8	15	24	4	17	20	44	15	22
10	2	18	19	23	15	45	4	46	21	4	15	36
11	2	32	19	39	16	6	5	14	21	23	15	51
12	2	45	19	54	16	27	5	43	21	43	16	6
13	2	59	20	9	16	49	6	11	22	3	16	21
14	3	13	20	25	17	10	6	40	22	22	16	35
15	3	27	20	40	17	32	7	9	22	42	16	50
16	3	40	20	56	17	54	7	38	23	1	17	5
17	3	54	21	11	18	16	8	6	23	21	17	19
18	4	8	21	26	18	37	8	34	23	40	17	34
19	4	22	21	42	18	58	9	1	24	0	17	48
20	4	35	21	57	19	20	9	29	24	19	18	3
21	4	49	22	12	19	42	9	57	24	38	18	17
22	5	3	22	28	20	4	10	25	24	57	18	32
23	5	17	22	43	20	26	10	54	25	16	18	46
24	5	30	22	59	20	48	11	23	25	35	19	1
25	5	44	23	15	21	10	11	51	25	54	19	15
26	5	58	23	31	21	31	12	19	26	13	19	30
27	6	12	23	46	21	53	12	47	26	31	19	45
28	6	25	24	2	22	15	13	15	26	50	19	59
29	6	39	24	18	22	37	13	43	27	9	20	14

Tabu-

Horæ 18. Aſcenſionis rectæ medij Celi.

Minuta	Decimæ		Vndec.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♑		♑		♒		♈		♉		♊	
	G	M	G	M	G	M	G	M	G	M	G	M
30	6	53	24	34	23	10	14	11	27	28	20	28
31	7	7	24	49	23	22	14	39	27	46	20	43
32	7	20	25	5	23	45	15	6	28	5	20	57
33	7	34	25	21	24	8	15	34	28	23	21	11
34	7	48	25	37	24	31	16	2	28	42	21	26
35	8	2	25	53	24	54	16	30	29	0	21	40
36	8	16	26	8	25	16	16	58	29	18	21	54
37	8	30	26	24	25	39	17	26	29	37	22	9
38	8	44	26	40	26	2	17	53	29	55	22	23
39	8	58	26	56	26	25	18	20	♊ 0	13	22	37
40	9	11	27	12	26	48	18	47	0	31	22	51
41	9	25	27	28	27	11	19	14	0	49	23	6
42	9	39	27	44	27	34	19	41	1	7	23	20
43	9	53	28	0	27	57	20	8	1	25	23	34
44	10	6	28	16	28	20	20	35	1	43	23	48
45	10	20	28	32	28	43	21	2	2	1	24	2
46	10	34	28	48	29	6	21	29	2	19	24	16
47	10	48	29	4	29	30	21	57	2	36	24	30
48	11	2	29	21	29	54	22	24	2	54	24	44
49	11	16	29	37	♓ 0	17	22	51	3	12	24	58
50	11	30	29	53	0	41	23	17	3	29	25	12
51	11	44	♒ 0	10	1	5	23	43	3	46	25	26
52	11	57	0	26	1	30	24	9	4	4	25	40
53	12	11	0	43	1	54	24	35	4	21	25	54
54	12	25	0	59	2	17	25	2	4	39	26	8
55	12	38	1	15	2	41	25	28	4	57	26	23
56	12	53	1	32	3	5	25	53	5	14	26	37
57	13	6	1	48	3	28	26	20	5	31	26	51
58	13	20	2	4	3	52	26	46	5	48	27	5
59	13	34	2	21	4	16	27	12	6	6	27	19

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Horæ 19. Aſcenſionis rectæ medij Cęli.												
	Decimæ		Vndec.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♑		♒		♓		♈		♊		♊	
	G	M	G	M	G	M	G	M	G	M	G	M
0	13	48	2	38	4	39	27	38	6	23	27	33
1	14	2	2	54	5	3	28	4	6	40	27	47
2	14	56	3	11	5	28	28	30	6	57	28	1
3	14	30	3	27	5	52	28	57	7	14	28	15
4	14	44	3	44	6	16	29	23	7	31	28	29
5	14	58	4	1	6	40	29	48	7	48	28	42
6	15	12	4	18	7	4	♉ 0	14	8	4	28	56
7	15	26	4	34	7	28	0	40	8	21	29	10
8	15	40	4	51	7	53	1	5	8	37	29	24
9	15	54	5	8	8	18	1	30	8	53	29	37
10	16	8	5	24	8	43	1	55	9	10	29	51
11	16	22	5	41	9	8	2	20	9	27	♋ 0	5
12	16	36	5	58	9	33	2	45	9	43	0	18
13	16	50	6	15	9	58	3	10	10	0	0	32
14	17	3	6	32	10	23	3	35	10	16	0	45
15	17	17	6	49	10	47	4	0	10	33	0	59
16	17	31	7	6	11	12	4	25	10	49	1	13
17	17	45	7	23	11	37	4	49	11	5	1	26
18	17	59	7	40	12	2	5	14	11	22	1	39
19	18	13	7	57	12	27	5	38	11	38	1	53
20	18	27	8	14	12	52	6	3	11	55	2	6
21	18	41	8	31	13	17	6	27	12	11	2	20
22	18	55	8	48	13	42	6	51	12	27	2	34
23	19	9	9	6	14	7	7	15	12	43	2	47
24	19	23	9	24	14	33	7	39	12	59	3	1
25	19	37	9	41	14	58	8	3	13	15	3	15
26	19	51	9	59	15	23	8	28	13	31	3	28
27	20	5	10	16	15	48	8	51	13	46	3	42
28	20	30	10	33	16	14	9	14	14	2	3	55
29	20	34	10	51	16	39	9	38	14	18	4	9

Minuta

Tabu-

Minuta

Horæ 19. Aſcenſionis rectæ medij Cœli.												
	Decimæ		Vndec.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♑		♒		♓		♉		♊		♋	
	G	M	G	M	G	M	G	M	G	M	G	M
30	20	48	11	8	17	5	10	2	14	33	4	23
31	21	2	11	25	17	31	10	25	14	49	4	36
32	21	16	11	43	17	57	10	48	15	4	4	50
33	21	30	12	0	18	22	11	11	15	20	5	4
34	21	44	12	18	18	48	11	34	15	36	5	17
35	21	58	12	36	19	14	11	57	15	52	5	30
36	22	12	12	54	19	39	12	21	16	7	5	44
37	22	26	13	12	20	5	12	44	16	22	5	57
38	22	40	13	20	20	30	13	8	16	38	6	11
39	22	54	13	47	20	55	13	31	16	53	6	24
40	23	8	14	5	21	21	13	54	17	8	6	38
41	23	23	14	22	21	46	14	17	17	24	6	51
42	23	37	14	40	22	12	14	39	17	39	7	4
43	23	51	14	58	22	38	15	1	17	55	7	18
44	24	6	15	16	23	4	15	23	18	10	7	32
45	24	20	15	34	23	30	15	45	18	25	7	45
46	24	34	15	52	23	56	16	7	18	40	7	59
47	24	48	16	10	24	22	16	29	18	55	8	12
48	25	3	16	28	24	48	16	51	19	10	8	25
49	25	17	16	46	25	14	17	13	19	25	8	39
50	25	31	17	4	25	40	17	35	19	40	8	52
51	25	45	17	22	26	6	17	57	19	55	9	5
52	25	59	17	40	26	32	18	19	20	10	9	19
53	26	13	17	59	26	58	18	40	20	25	9	32
54	26	27	18	17	27	24	19	1	20	40	9	45
55	26	41	18	36	27	50	19	23	20	55	9	58
56	26	56	18	54	28	16	19	44	21	10	10	12
57	27	10	19	12	28	41	20	6	21	25	10	25
58	27	24	19	31	29	8	20	27	21	39	10	38
59	27	38	19	49	29	34	20	49	21	54	10	51

Horæ 20. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♑ G	M	Vndec. ♒ G	M	Duodec. ♈ G	M	Horoſcop. ♉ G	M	Secundæ ♊ G	M	Tertiæ ♋ G	M
0	27	53	20	7	0	0	21	10	22	9	11	4
1	28	7	20	26	0	26	21	31	22	24	11	18
2	28	21	20	44	0	52	21	53	22	32	11	31
3	28	36	21	2	1	18	22	14	22	44	11	45
4	28	51	21	21	1	44	22	34	23	8	11	58
5	29	5	21	39	2	11	22	55	23	23	12	11
6	29	19	21	58	2	36	23	15	23	37	12	24
7	29	34	22	17	3	2	23	35	23	52	12	37
8	29	49	22	36	3	28	23	56	24	7	12	50
9	♒ 0	3	22	55	3	55	24	16	24	21	13	3
10	0	17	23	13	4	21	24	37	24	35	13	17
11	0	32	23	32	4	46	24	57	24	49	13	30
12	0	46	23	50	5	12	25	17	25	3	13	43
13	1	0	24	9	5	38	25	37	25	17	13	56
14	1	15	24	28	6	3	25	56	25	31	14	9
15	1	29	24	47	6	29	26	16	25	46	14	22
16	1	44	25	6	6	55	26	36	26	0	14	35
17	1	58	25	25	7	21	26	56	26	14	14	49
18	2	13	25	44	7	48	27	16	26	29	15	2
19	2	27	26	2	8	14	27	35	26	43	15	15
20	2	42	26	21	8	39	27	55	26	57	15	28
21	2	56	26	40	9	5	28	14	27	11	15	41
22	3	11	26	59	9	30	28	34	27	25	15	54
23	3	25	27	18	9	55	28	53	27	39	16	7
24	3	40	27	38	10	21	29	13	27	53	16	20
25	3	55	27	57	10	46	29	32	28	7	16	33
26	4	9	28	17	11	12	29	51	28	21	16	46
27	4	24	28	36	11	38	♊ 0	10	28	35	16	59
28	4	39	28	55	12	3	0	29	29	49	17	12
29	4	53	29	14	12	29	0	48	29	3	17	26

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Horæ 20. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ		Vndec.		Duodec.		Horoſc.		Secundæ		Tertiæ	
	♒ G	M	♒ G	M	♈ G	M	♊ G	M	♊ G	M	♋ G	M
30	5	8	29	34	12	55	1	7	29	16	17	39
31	5	21	29	53	13	21	1	26	29	30	17	52
32	5	37	♓ 0	13	13	46	1	45	29	44	18	5
33	5	51	0	33	14	12	2	4	29	57	18	18
34	6	6	0	52	14	37	2	22	♋ 0	11	18	31
35	6	20	1	12	15	2	2	40	0	25	18	44
36	6	35	1	31	15	27	2	59	0	38	18	57
37	6	48	1	51	15	53	3	17	0	52	19	10
38	7	4	2	10	16	18	3	35	1	5	19	24
39	7	19	2	30	16	43	3	53	1	19	19	37
40	7	34	2	50	17	8	4	11	1	32	19	50
41	7	48	3	9	17	33	4	29	1	46	20	3
42	8	3	3	29	17	58	4	47	1	59	20	15
43	8	18	3	48	18	23	5	5	2	13	20	28
44	8	33	4	8	18	48	5	23	2	26	20	41
45	8	47	4	27	19	13	5	42	2	40	20	54
46	9	2	4	47	19	37	6	0	2	54	21	7
47	9	17	5	6	20	2	6	18	3	7	21	20
48	9	32	5	25	20	27	6	31	3	21	21	33
49	9	47	5	44	20	52	6	53	3	34	21	46
50	10	2	6	5	21	17	7	10	3	47	21	59
51	10	17	6	25	21	42	7	28	4	1	22	12
52	10	32	6	44	22	7	7	45	4	14	22	25
53	10	46	7	4	22	32	8	2	4	28	22	38
54	11	1	7	25	22	57	8	20	4	41	22	51
55	11	16	7	45	23	21	8	34	4	55	23	4
56	11	31	8	6	23	44	8	54	5	8	23	17
57	11	46	8	26	24	8	9	11	5	21	23	30
58	12	1	8	46	24	32	9	28	5	34	23	43
59	12	16	9	7	24	57	9	45	5	48	23	56

Ta-

Horæ 11. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♒		♓		♈		♊		♋		♋	
	G	M	G	M	G	M	G	M	G	M	G	M
0	12	31	9	27	25	21	10	2	6	1	24	9
1	12	46	9	47	25	44	10	19	6	14	24	22
2	13	1	10	7	26	8	10	36	6	27	24	35
3	13	16	10	27	26	32	10	53	6	40	24	48
4	13	31	10	47	26	55	11	10	6	53	25	1
5	13	46	11	7	27	19	11	27	7	6	25	14
6	14	1	11	27	27	43	11	43	7	19	25	27
7	14	16	11	47	28	6	12	0	7	32	25	40
8	14	31	12	7	28	30	12	17	7	45	25	53
9	14	46	12	27	28	54	12	33	7	58	26	6
10	15	1	12	48	29	18	12	50	8	11	26	19
11	15	16	13	8	29	42	13	6	8	24	26	32
					♉							
12	15	31	13	28	0	6	13	23	8	37	26	45
13	15	46	13	48	0	30	13	39	8	50	26	58
14	16	1	14	8	0	54	13	55	9	2	27	11
15	16	16	14	29	1	17	14	11	9	16	27	24
16	16	32	14	50	1	40	14	27	9	29	27	37
17	16	47	15	11	2	3	14	43	9	42	27	50
18	17	2	15	31	2	26	14	59	9	55	28	3
19	17	17	15	51	2	49	15	15	10	8	28	15
20	17	33	16	11	3	12	15	31	10	22	28	28
21	17	48	16	32	3	35	15	46	10	33	28	41
22	18	3	16	53	3	58	16	2	10	46	28	54
23	18	18	17	14	4	21	16	18	10	59	29	7
24	18	33	17	34	4	44	16	34	11	12	29	20
25	18	48	17	55	5	6	16	49	11	25	29	33
26	19	3	18	15	5	29	17	5	11	38	29	45
27	19	19	18	35	5	52	17	21	11	51	29	57
											♌	
28	19	34	18	56	6	15	17	36	12	3	0	11
29	19	49	19	17	6	38	17	52	12	16	0	24

Tabula

Horæ 11. Aſcenſionis rectæ medij Celi.												
Minuta	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♒ G	M	♓ G	M	♉ G	M	♊ G	M	♋ G	M	♌ G	M
30	20	5	19	38	7	0	18	7	12	28	0	37
31	20	20	19	58	7	23	18	22	12	41	0	50
32	20	35	20	19	7	45	18	38	12	53	1	3
33	20	51	20	39	8	7	18	53	13	6	1	16
34	21	6	21	0	8	29	19	9	13	19	1	29
35	21	22	21	21	8	50	19	24	13	31	1	42
36	21	37	21	41	9	12	19	40	13	44	1	55
37	21	52	22	2	9	34	19	55	13	57	2	8
38	22	7	22	23	9	56	20	10	14	9	2	21
39	22	23	22	44	10	18	20	26	14	22	2	33
40	22	38	23	4	10	40	20	41	14	35	2	46
41	22	53	23	25	11	2	20	57	14	47	2	59
42	23	8	23	45	11	23	21	12	15	0	3	12
43	23	23	24	6	11	44	21	27	15	13	3	25
44	23	39	24	27	12	6	21	42	15	25	3	38
45	23	54	24	48	12	28	21	57	15	38	3	51
46	24	10	25	9	12	50	22	11	15	50	4	3
47	24	26	25	30	13	11	22	26	16	2	4	16
48	24	41	25	50	13	33	22	41	16	15	4	29
49	24	57	26	11	13	54	22	56	16	27	4	42
50	25	12	26	32	14	15	23	11	16	39	4	55
51	25	28	26	52	14	36	23	26	16	52	5	8
52	25	43	27	13	14	57	23	40	17	4	5	11
53	25	59	27	34	15	18	23	55	17	17	5	33
54	26	15	27	55	15	38	24	10	17	29	5	46
55	26	30	28	15	15	59	24	24	17	42	5	59
56	26	46	28	36	16	19	24	38	17	54	6	12
57	27	1	28	57	16	40	24	52	18	7	6	25
58	27	17	29	18	17	0	25	7	18	19	6	38
59	27	33	29	39	17	20	25	21	18	31	6	56

Tabula

Horæ 22. Aſcenſionis rectæ medij Cęli.

Minuta	Decimæ ♒ G	M	Vndec. ♈ G	M	Duodec. ♉ G	M	Horoſcop. ♊ G	M	Secundæ ♋ G	M	Tertiæ ♌ G	M
0	27	48	0	5	17	41	25	35	18	44	7	4
1	28	4	0	21	18	1	25	50	18	56	7	17
2	28	20	0	42	18	22	26	4	19	8	7	30
3	28	35	1	3	18	42	26	18	19	21	7	43
4	28	51	1	24	19	3	26	32	19	33	7	56
5	29	7	1	45	19	23	26	47	19	45	8	9
6	29	23	2	5	19	43	27	1	19	58	8	22
7	29	38	2	26	20	3	27	15	20	10	8	35
8	29	♓ 54	2	47	20	23	27	29	20	22	8	48
9	0	9	3	8	20	44	27	43	20	34	9	1
10	0	25	3	28	21	4	27	57	20	46	9	14
11	0	40	3	49	21	23	28	11	20	58	9	27
12	0	56	4	10	21	43	28	25	21	11	9	40
13	1	11	4	30	22	3	28	39	21	23	9	53
14	1	27	4	51	22	22	27	53	21	35	10	6
15	1	43	5	12	22	42	29	7	21	48	10	19
16	1	59	5	33	23	1	29	21	22	0	10	32
17	1	14	5	54	23	21	29	35	22	12	10	45
18	2	30	6	15	23	40	29	♋ 48	22	24	10	57
19	2	46	6	35	24	0	0	2	22	36	11	10
20	3	2	6	56	24	19	0	15	22	48	11	23
21	3	18	7	16	24	38	0	29	23	0	11	36
22	3	37	7	37	24	57	0	43	23	12	11	49
23	3	50	7	58	25	16	5	56	23	15	12	2
24	4	6	8	19	25	35	1	10	23	37	12	15
25	4	21	8	39	25	54	1	23	23	49	12	27
26	4	37	9	0	26	13	1	37	24	2	12	40
27	4	53	9	21	26	31	1	50	24	14	12	53
28	5	9	9	41	26	50	2	4	24	26	13	6
29	5	25	10	2	27	9	2	17	24	38	13	19

Tabu-

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Horæ 22. Aſcenſionis rectæ medij Celi.

Minuta	Decimæ ♓ G	M	Vndec. ♈ G	M	Duodec. ♉ G	M	Horoſc. ♋ G	M	Secundæ ♋ G	M	Tertiæ ♌ G	M
30	5	41	10	22	27	28	2	30	24	50	13	32
31	5	57	10	43	27	46	2	44	25	2	13	45
32	6	13	11	4	28	5	2	57	25	14	13	58
33	6	29	11	25	28	23	3	11	25	26	14	11
34	6	45	11	45	28	42	3	24	25	38	14	24
35	7	1	12	5	29	0	3	38	25	50	14	37
36	7	17	12	26	29	18	3	51	26	2	14	50
37	7	33	12	46	29	37	4	4	26	15	15	3
38	7	49	13	7	29	55	4	18	26	27	15	17
39	8	5	13	28	0 ♊	13	4	31	26	39	15	30
40	8	21	13	49	0	31	4	44	26	51	15	43
41	8	37	14	9	0	49	4	57	27	3	15	56
42	8	53	14	29	1	7	5	11	27	15	16	9
43	9	9	14	49	1	25	5	24	27	27	16	22
44	9	25	15	10	1	43	5	37	27	39	16	35
45	9	41	15	31	2	1	5	50	27	51	16	48
46	9	57	15	52	2	19	6	3	28	3	17	1
47	10	13	16	12	2	36	6	16	28	15	17	14
48	10	29	16	32	2	54	6	29	28	27	17	27
49	10	45	16	52	3	12	6	42	28	39	17	40
50	11	1	17	12	3	29	6	55	28	51	17	53
51	11	17	17	33	3	46	7	9	29	2	18	6
52	11	33	17	53	4	4	7	21	29	14	18	19
53	11	50	18	13	4	21	7	34	29	26	18	32
54	12	6	18	34	4	39	7	47	29	38	18	45
55	12	22	18	53	4	57	8	0	29	50	18	58
56	12	38	19	13	5	14	8	13	0 ♌	2	19	11
57	12	54	19	33	5	31	8	26	0	14	19	24
58	13	11	19	53	5	48	8	39	0	26	19	37
59	13	27	20	13	6	6	8	51	0	38	19	50

Horæ 23. Aſcenſionis rectæ medij Celi.

Minuta	Decimæ ♓ G	M	Vndec. ♈ G	M	Duodec. ♊ G	M	Horoſcop. ♋ G	M	Secundæ ♌ G	M	Tertiæ ♌ G	M
0	13	43	20	33	6	23	9	5	0	50	20	3
1	13	59	20	53	6	40	9	18	1	2	20	17
2	14	15	21	14	6	57	9	30	1	14	20	30
3	14	31	21	34	7	14	9	43	1	26	20	43
4	14	47	21	54	7	31	9	56	1	38	20	56
5	15	3	22	15	7	48	10	8	1	50	21	9
6	15	19	22	35	8	4	10	21	2	2	21	22
7	15	35	22	56	8	21	10	33	2	13	21	35
8	15	52	23	16	8	37	10	46	2	25	21	48
9	16	9	23	35	8	53	10	59	2	37	22	1
10	16	25	23	55	9	10	11	12	2	49	22	14
11	16	41	24	16	9	27	11	24	3	1	22	27
12	16	57	24	35	9	43	11	37	3	13	22	40
13	17	14	24	55	10	0	11	49	3	24	22	53
14	17	30	25	14	10	16	12	2	3	36	23	6
15	17	46	25	33	10	33	12	14	3	48	23	19
16	18	2	25	52	10	49	12	26	4	0	23	32
17	18	18	26	12	11	5	12	39	4	12	23	45
18	18	34	26	31	11	22	12	51	4	24	23	58
19	18	51	26	51	11	38	13	3	4	36	24	11
20	19	7	27	10	11	55	13	16	4	47	24	24
21	19	24	27	30	12	11	13	28	4	59	24	37
22	19	40	27	50	12	27	13	40	5	11	24	50
23	19	56	28	9	12	43	13	53	5	23	25	4
24	20	12	28	29	12	59	14	5	5	34	25	17
25	20	27	28	48	13	15	14	18	5	46	25	30
26	20	44	29	8	13	31	14	30	5	58	25	43
27	21	1	29	27	13	46	14	43	6	9	25	56
28	21	17	29	47	14	2	14	55	6	21	26	10
29	21	33	0 ♉	7	14	18	15	7	6	33	26	23

Tabu-

	Horæ 23. Aſcenſionis rectæ medij Cęli.											
	Decimæ		Vndec.		Duodec.		Horoſcop.		Secundæ		Tertiæ	
	♓		♉		♊		♋		♌		♌	
Minuta	G	M	G	M	G	M	G	M	G	M	G	M
30	21	49	0	26	14	33	15	20	6	45	26	36
31	22	6	0	46	14	49	15	32	6	57	26	49
32	22	22	1	5	15	4	15	44	7	9	27	3
33	22	38	1	24	15	20	15	57	7	21	27	16
34	22	55	1	43	15	36	16	9	7	32	27	29
35	23	11	2	3	15	52	16	21	7	44	27	42
36	23	27	2	22	16	7	16	33	7	56	27	56
37	23	44	2	42	16	22	16	45	8	8	28	9
38	24	0	3	1	16	38	16	58	8	20	28	22
39	24	16	3	20	16	53	17	10	8	32	28	35
40	24	33	3	39	17	8	17	22	8	43	28	48
41	24	49	3	58	17	24	17	34	8	55	29	1
42	25	6	4	16	17	39	17	46	9	7	29	14
43	25	22	4	35	17	55	17	58	9	19	29	27
44	25	38	4	54	18	10	18	11	9	31	29	41
45	25	55	5	13	18	25	18	23	9	43	29	54
46	26	11	5	32	18	40	18	35	9	54	0	7
47	26	27	5	51	18	55	18	47	10	0	0	20
											♍	
48	26	44	6	10	19	10	18	59	10	18	0	34
49	27	0	6	28	19	25	19	11	10	30	0	47
50	27	16	6	47	19	40	19	23	10	41	1	0
51	27	33	7	5	19	55	19	35	10	53	1	13
52	27	49	7	24	20	10	19	47	11	5	1	26
53	28	5	7	43	20	25	19	59	11	16	1	40
54	28	22	8	2	20	40	20	11	11	28	1	53
55	28	38	8	21	20	55	20	23	11	40	2	6
56	28	55	8	39	21	10	20	35	11	51	2	19
57	29	11	8	58	21	25	20	47	12	3	2	33
58	29	27	9	16	21	39	20	59	12	15	2	46
59	29	44	9	34	21	54	21	11	12	26	2	59

Tabula Poſitionum, & Directionum.

Declinatio Septentrionalis ſupra Terram, & Meridiana ſub Terra.

	Eleuatio Poli.									
	1	2	3	4	5	6	7	8	9	10
	H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*
32	0.6. 32	0.13. 8	0.19.48	0.26.20	0.33. 0	0.39.40.	0.46.20	0.53. 4	0.59.52	1.6. 44
31	0.6. 28	0.12.56	0.19.28	0.25.56	0.32,32	0.39. 4	0 45.44	0.52.20	0.59. 0	1.5. 44
30	0.6. 24	0.12.44	0.19.12	0.25.36	0.32. 4	0.38.32	0.45. 4	0.51.32	0.58. 0	1.4. 48
29	0.6. 16	0.12.36	0.18.56	0.25.12	0.31.36	0.37 56	0.44.24	0.50,48	0.57 16	1.3. 52
28	0.6. 12	0.12.24	0.18.40	0.24.52	0.31. 8	0.37.24	.43.44	0.50. 4	0.56.28	1.2. 56
27	0.6. 8	0.12.12	0.18.24	0.24.32	0.30.40	0.36.52	0.43. 8	0.49.20	0.55.40	1.2. 0
26	0.6. 0	0.12. 4	0.18. 8	0.24. 8	0.30.16	0.36.20	0.42.28	0.48.40	0.54.52	1.1. 8
25	0.5. 56	0.11.52	0.17.52	0.23.48	0 29.48	0.35.52	0.41.52	0.47.56	0.54. 4	1.0. 16
24	0.5. 52	0.11.40	0.17.36	0.23.28	0.29.24	0.35.24	0.41.16	0.47.16	0.53.20	0.59.24
23	0.5. 42	0.11.32	0.17 24	0.23. 8	0.29. 0	0.34 52	0.40.40	0.46.36	0.52.32	0.58.36
22	0.5. 40	0.11.24	0.17. 8	0.22.48	0.28.36	0.34 20	0.40. 8	0.45 56	0.51.48	0.57.44
21	0.5. 36	0.11.12	0.16.52	0.22 28	0.28. 8	0.33.52	0.39.32	0.45 20	0.51. 4	0.56.56
20	0.5 32	0.11. 4	0.16.40	0.22. 8	0.27 44	0 33.24	0.39. 0	0.44.40	0.50.20	0.56. 8
19	0.5. 28	0.10.52	0.16.24	0.21.52	0.27.24	0.32.52	0.38.24	0.44. 0	0.49.40	0.55.20
18	0.5. 20	0.10.44	0.16.12	0.21.32	0.27. 0	0.32.24	0.37 52	0.43.24	0.48.56	0.54.32
17	0.5. 16	0.10.36	0.15.56	0.21 16	0.26.36	0.31 56	0.37.20	0.42.48	0.48.16	0.53.44
16	0.5. 12	0.10.34	0.15.44	0.20.56	0.26.12	0.31.32	0.36.48	0.42.12	0.47.32	0.53. 0
15	0.5. 8	0.10.16	0.15.28	0.20.36	0.25.52	0.31. 4	0.36.16	0.41.36	0.46.52	0.52.12
14	0.5. 4	0.10. 8	0.15.16	0.20.20	0.25.28	0.30.36	0.35.44	0.40 56	0.46.12	0.51.28
13	0.5. 0	0.10. 0	0.15. 4	0.20. 4	0.25. 4	0.30. 8	0.35.12	0.40.24	0.45.32	0.50.44
12	0.4. 56	0.9. 48	0.14.48	0.19.44	0.24.44	0.29.44	0.34.44	0.39.48	0.44.52	0.50.50
11	0.4. 52	0.9. 40	0.14.36	0.19.28	0.24.20	0.29.16	0.34.12	0.39 12	0.44.12	0.49.16
10	0.4. 48	0.9. 32	0.14.24	0.19. 8	0.24. 0	0.28.52	0.33.40	0.38.36	0.43.32	0.48.32
9	0.4. 40	0.9. 24	0.14.12	0.18.52	0.23.40	0.28.24	0.33.12	0 38. 0	0.42.52	0.47.48
8	0.4. 36	0.9. 16	0.13.56	0.18.36	0.23.16	0.28. 0	0.32.40	0.37.28	0.42.12	0.47. 4
7	0.4. 32	0.9. 8	0.13.44	0.18.20	0.22.56	0.27.32	0.32.12	0.36.52	0.41.36	0.46.26
6	0.4. 28	0.9. 0	0.13.32	0.18. 0	0.22.36	0 27. 8	0.31.40	0.36.20	0.40.56	0.45.40
5	0.4. 24	0.8. 48	0.13.20	0.17.44	0.22.12	0.26.44	0.31.12	0.35.44	0.40.20	0.44.56
4	0.4. 20	0.8. 40	0.13. 8	0.17.28	0.21.52	0.26.16	0.30.44	0.35.12	0.39.40	0.44.12
3	0.4. 16	0.8. 32	0.12.52	0.17.12	0.21.32	0.25.52	0.30.12	0.34.36	0.39. 4	0.43.32
2	0.4. 12	0.8. 24	0.12.40	0.16.52	0.21. 8	0.25.28	0.29.44	0.34. 4	0.38.24	0.42.48
1	0.4. 8	0.8. 16	0.12.28	0.16.36	0.20.48	0.25. 0	0.29.12	0.33.28	0.37.44	0.42. 8
0	0.4. 4	0.8. 8	0.12.16	0.16.26	0.20.28	0.24.36	0.28.44	0.32.56	0.37. 8	0.41.24

Ad

Ad eleuationem Poli graduum 44.min.29.

Eleuatio Poli.										
11	12	13	14	15	16	17	18	19	20	
H.l.ll.	*H.l.ll.*	*H.l.ll.*	*H.l.ll.*	*H.l.ll.*	*H.l.ll.*	*H.l.ll.*	*H.l.ll.*	*H.l.ll.*	*H.l.ll.*	
1.13.36	1.20.32	1.27.36	1.34.40	1.41.52	1.49 12	1.56.36	2.4. 8	2.11.44	2.19.36	32
1.12.32	1.19.20	1.26.16	1.33.16	1.40.24	1.47.36	1.54.52	2.2. 20	2.9. 48	2.17.32	31
1.11.28	1.18.12	1.25. 4	1.31.56	1.38.56	1.46. 4	1 53.12	2.0. 32	2.7. 56	2.15.32	30
1.10.24	1.17. 4	1.23.48	1.30.36	1.37.28	1.44 32	1.51.32	1.58.48	2.6. 4	2.13.32	29
1.9. 24	1.15.56	1.22.36	1.29.16	1.36. 4	1.43. 0	1.49.56	1.57 45	2.4. 16	2.11.36	28
1.8. 24	1.14.52	1.21 24	1.28. 0	1.34.44	1.41.32	1.48.24	1.55.24	2.2. 28	2.9. 44	27
1.7. 24	1.13.48	1.20.16	1.26.48	1.33.24	1.39. 4	1.46.52	1.53.44	2.0. 40	2.7. 56	26
1.6. 28	1.12.41	1.19. 8	1.25.36	1.32. 4	1.38.40	1.45.20	1.52. 8	1.59. 0	2.6. 4	25
1.4. 32	1.11 44	1.18. 0	1.24.24	1.30.44	1.37.16	1.43.48	1.50.32	1.57.20	2.4. 16	24
1.5. 36	1.10.44	1.16 52	1.23.12	1.29.28	1.35.52	1.42 20	1.49. 0	1.55.40	2.2. 32	23
1.3. 40	1.9. 44	1.15.48	1.22. 0	1.28 12	1.34 32	1.40.56	1.47.28	1.54. 4	2.0. 48	22
1.2. 48	1.8. 44	1.14 44	1.20.18	1.26.56	1.33.16	1.39.28	1.45.56	1.52.24	1.59. 8	21
1.1. 52	1.7. 44	1.13.40	1.19.36	1.25.44	1.31 52	1.38 4	1.44.24	1.50.52	1.57.28	20
1.1. 0	1.6. 48	1.12.40	1.18.28	1.24.32	1.30 36	1.36 44	1.42.56	1.49.20	1.55.48	19
1.0. 8	1.5. 52	1.11.36	1.17.24	1 23.20	1,29.20	1.35.20	1.41.32	1.47.44	1.54. 8	18
0.59.16	1.4. 56	1.10.36	1.16.16	1.22. 8	1.28. 4	1.34. 0	1.40. 4	1 46.12	1.52 32	17
0.58.28	1.4. 0	1.9. 36	1.15.12	1.20.56	1.26.48	1.32.40	1.38.40	1.44.44	1.50.56	16
0 57.36	1.3. 4	1.8. 36	1.14. 8	1.19.48	1.25.32	1.31.20	1.37.16	1.43.16	1.49.24	15
0.56.48	1.2. 8	1.7. 36	1.13. 4	1.18.40	1.24.20	1.30. 0	1 35.52	1.41.48	1.47.48	14
0.55.56	1.1. 16	1.6. 36	1.12. 0	1.17.32	1.23. 8	1.28.44	1.34.28	1.40.20	1.46.16	13
0.55. 8	1.0. 28	1.5. 40	1.10.56	1.16.24	1.21.56	1.27.28	1.33. 2	1.38.52	1.44.44	12
0.54.20	0.59.28	1.4. 40	1.9. 56	1.15.16	1.20.44	1.26. 8	1.31.44	1.37.24	1.43 12	11
0.53.32	0.58.30	1.3. 44	1.8. 52	1.14. 8	1.19.32	1.24.52	1.30.24	1.36. 0	1.41.44	10
0.52.44	0.57.44	1.2. 48	1.7. 52	1.13. 4	1.18.20	1.23.40	1.29. 4	1.34.36	1.40.12	9
0.51.56	0.56.52	1.1. 52	1.6. 48	1.11.56	1.17,12	1.22. 4	1.27.44	1.33. 8	1.38.44	8
0.51. 8	0.56. 0	1.0. 52	1.5. 48	1.10.52	1.16. 0	1.21. 8	1.26.24	1.31.44	1.37.16	7
0.50 20	0.55. 8	0.59.56	1.4. 48	1.9. 48	1.14.52	1.19.52	1.25. 4	1.30.20	1.35.48	6
0.49.32	0.54.16	0 59. 0	1 3. 48	1 8. 44	1.13.40	1.18.40	1.23.48	1.29. 0	1.34.16	5
0.48.48	0.52.24	0.58. 8	1.2. 48	1.7. 36	1.12.32	1.17.28	1.22.28	1.27.36	1.32.48	4
0.48. 0	0.52 32	0.57.12	1.1. 48	1.6. 32	1.11.24	1.16.12	1.21.12	1.26.12	1.31.24	3
0.47.12	0.51.40	0.56.16	1.0. 48	1.5. 28	1.10.12	1.15. 0	1.19.52	1.24.48	1.29.56	2
0.46.28	0.50.52	0.55.20	0.59.48	1.4. 24	1.9. 4	1.13.44	1.18.32	1.23.28	1.28.28	1
0.45.40	0.50. 0	0.54.34	0.58.48	1.3. 20	1.7. 56	1.12.32	1.17.16	1.22. 0	1.27. 0	0

Declinatio Septemtrionalis ſupra Terram, & Meridiana ſub Terra.

Tabu-

Tabula Poſitionum, & Directionum

Declinatio Septentrionalis ſupra Terram, & Meridiana ſub Terra.

	Eleuatio Poli.									
	21	22	23	24	25	26	27	28	29	30
	H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*
32	2.27.32	2.35.36	2.43.56	2.52.24	..1. 8	3.10. 8	3.19.16	3.28.44	3.38.32	3.48.36
31	2.25.20	2.33.20	2.41.32	2.49.52	2.58.28	3.7. 16	3.16.20	3.25.40	3.35.16	3.45.12
30	2.23. 2	2.31. 4	2.39. 8	2.47.24	2.55.52	3.4. 32	3.13.24	3.22.40	3.32. 8	3.41.52
29	2.21. 6	2.27.52	2.36.52	2.44.56	2.53.2	3.1. 52	3.10.36	3.19.40	3.29. 4	3.38.40
28	2.19. 8	2.26.44	2.34.36	2.42.36	2.50.48	2.59.16	3.7. 52	3.16.48	3.26 0	3.35.32
27	2.17. 8	2.24.40	2.32.20	2.40.16	2 48.24	2.56.40	3.5. 12	3.14. 0	3.23. 4	3.32.28
26	2.15.12	2.22.36	2.30.12	2.38. 0	2.46. 0	2.54 12	3.2. 32	3.11,16	3.20.12	3.39.24
25	2.13.16	2.20.36	2.28. 4	2.35.44	2.43.40	2.51.44	3.0. 0	3.8. 32	3.17.24	3.26.28
24	2.11.26	2.18.36	2.26. 0	2.33.32	2.41.20	2.49.20	2.57.28	3.5. 56	3.14.40	3.23.36
23	2.9. 28	2.16.40	2.23.56	2.31.24	2.39. 4	2.46.56	2.54.56	3.3. 20	3.11.56	3.20.44
22	2.7. 40	2.14.44	2.21.56	2.29.16	2.36.52	2.44.36	2.52.32	3.0. 44	3.9. 12	3.17.56
21	2.5. 52	2.12.48	2.19.56	2.27. 8	2.34.40	2.42.20	2.50. 8	2.58.12	3.6. 36	3.15.12
20	2.4. 8	2.10.51	2.17-56	2.25. 4	2.32.28	2.40. 4	2.47.44	2.55.44	3.4. 0	3.12.32
19	2.2. 24	2.9. 8	2.16. 0	2.23. 4	2.30.20	2.37.48	2.45 24	2.53.20	3.1. 28	3.9. 52
18	2.0. 40	2.7. 20	2.14. 8	2.21. 4	2.28.16	2.35.36	2.43. 8	2.50.56	2.59. 0	3.7. 16
17	1.58.56	2 5. 32	2.12.12	2.19. 4	2.26.12	2.33.28	2.40.52	2.48.32	2.56.28	3.4. 40
16	1.57.16	2.3. 44	2.10.20	2.17. 8	2.24. 8	2.31.20	2.38.36	2.46.12	2.54. 0	3.2. 8
15	1.55.36	2.2. 0	2.8. 32	2.15.12	2.22. 8	2.29.12	2.36.24	2.43.52	2.51.36	2,59.36
14	1.54. 0	2.0. 16	2.6. 44	2.13.16	2.20. 8	2.27. 4	2.34.12	2.41.36	2.49.12	2.57. 8
13	1.52.20	1.58.32	2.4. 56	2.11.24	2.18. 8	2.25. 0	2.32. 0	2.39.20	2.46.52	2.54.40
12	1.50.44	1.56.52	2.3. 8	2.9. 32	2.16. 8	2.22.56	2.29.52	2.37. 4	2.44.32	2.52.12
11	1.49. 8	1.55. 8	2.1. 20	2.7. 40	2.14.12	2.20.52	2.27.44	2.34.52	2.42.12	2.49.48
10	1.47.32	1.53.28	1.59.36	2.5. 48	2.12.16	2.18.52	2.25.36	2.32 40	2.39.36	2.47.24
9	1.45.56	1.51.48	1.57.48	2.4. 0	2.10 20	2.16.52	2.23.3	2.30.28	2.37 36	2.45. 0
8	1.44.34	1.50. 8	1.56. 4	2.2. 8	2.8. 24	2.14.52	2.21.24	2.28.16	2.35 20	2.42.36
7	1.42.43	1.48.32	1.54.20	2.0. 20	2.6. 32	2.12.52	2.19.20	2.26. 8	2.33. 4	2.40.16
6	1.41.16	1.46.52	1.52,36	1.58.32	2.4. 40	2.10.52	2.17.16	2.23.56	2.30.48	2.37.56
5	1.39.40	1.45.16	1.50 56	1.56.44	2.2. 44	2 8. 52	2.15.12	2.21.48	2,28.36	2.35.36
4	1.38. 8	1.43 36	1.49.12	1.54.56	2.0. 52	2.6. 52	2.13.12	2. 9.40	2.26.20	2.33.16
3	1.36,36	1.42. 0	1,47.32	1.53. 8	1.59. 0	2.4. 56	2.11. 8	2.17.32	2.24. 8	2.30.56
2	1 35. 4	1.40.24	1.45 48	1.51.20	1.57. 8	2.3. 0	2.9. 4	2.15.24	2,21.56	2.28.36
1	1.33.32	1.38.44	1.44. 4	1.49.32	1.55.16	2.1. 2	2.7. 4	2.13.16	2.19.40	2.26.20
0	1.32. 0	1.37. 8	1.42.24	1.47.48	1.53.24	1.59. 6	2.5. 0	2.11. 8	2.17.28.	2.24. 0

Ad

Ad eleuationem Poli graduum 44. min. 29.

Eleuatio Poli.										
31	32	33	34	35	36	37	38	39	40	
H.I.M.	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	
3.59. 4	4.10. 0	4.21 20	4.33.12	4.45.40	4.58.52	5.12.48	5.27.40	5.43.44	6. 1.16	32
3.55.32	4.6. 16	4.17.28	4.29. 8	4.41.24	4.54.24	5. 8. 8	5.22.48	5.38.26	5.55.56	31
3.52. 4	4.2. 40	4..3.40	4.25. 8	4.37.16	4.50. 4	5. 3.36	5.18. 4	5.33.36	5.50.44	30
3.48.40	3.59. 8	4 10. 0	4.21.16	4.33.12	4.45.52	4.59.12	5.13.28	5.28.48	5.45.40	29
3.45.24	3.55.40	4.6. 24	4.17.32	4.29.16	4.41.44	4.54.56	5. 9. 0	5.24. 8	5.40.48	28
3.42.12	3.52.20	4.2. 52	4.13.52	4.25.28	4.37.48	4.50.48	5. 4.40	5.19.36	5.36. 4	27
3.39. 0	3.49. 4	3.59.28	4.10.16	4.21.44	4.33.52	4.46.44	5. 0.24	5.15.12	5.31.28	26
3.35.56	3.45.48	3.56. 8	4. 6.48	4.18. 4	4.30. 4	4.42.44	5.56.12	5.10.52	5.26.56	25
3.32.56	3.42.40	3.52.48	4. 3.24	4.14.32	4.26.20	4.38.52	4.52.12	5. 6.40	5.22.32	24
3.30. 0	3.39.36	3.49.36	4. 0. 0	4.11. 0	4.22.44	4.35. 4	4.48.16	5. 2.32	5.18.16	23
3.27. 4	3.36.32	3.46.28	3.56.44	4. 7.36	4.19.12	4.31.24	4.44.24	4.58.32	5.14. 4	22
3.24.12	3.33.36	3.43.20	3.53.28	4. 4.16	4.15.40	4.27.44	4.40.36	4.54.36	5. 9.56	21
3.21.24	3.30.40	3.40.16	3.50.20	4. 0.56	4.12.12	4.24. 8	4.36.52	4.50.40	5. 5.56	20
3.18.40	3.27.44	3.37.16	3.47.12	3.57.40	4 8.48	4.20.36	4.33 12	4.46.52	5. 2. 0	19
3.15.56	3.24.56	3.34 20	3.44. 8	3.54.28	4. 5.28	4.17. 8	4.29.36	4.43. 8	4.58. 4	18
3.13.12	3.22. 8	3.31.24	3.41. 4	3.51.20	4. 2.12	4.13.44	4.25. 4	4.39.28	4.54.16	17
3.10.32	3.19.20	3.28.32	3.38. 4	3.48.12	3.59. 0	4.10.24	4 22.26	4.35.52	4.50.28	16
3.7. 56	3.16.36	3.25.40	3.35 8	3.45. 8	3.55.48	4. 7. 4	4.19. 8	4.32.16	4.46.48	15
3.5. 20	3.13.56	3.22.52	3.32.12	3.42. 4	3.52.36	4. 3.48	4.15.44	4.28.44	4.43. 8	14
3.2. 44	3.11.16	3.20. 4	3.39.20	3.39. 4	3.49.28	4. 0.32	4.12.24	5.25.12	4.39 28	13
3.0. 12	3.8. 36	3.17.20	3.36.28	3.36. 8	3.46.24	3.57.20	4. 9. 4	4.21.48	4.35.52	12
2.57.40	3.6. 0	3.14.36	3.23.36	3.33. 8	3.43.20	3.54. 8	4. 5.44	4.18.20	4.32.20	11
2.55.12	3.3. 24	3.11.56	3.20.48	3.30.16	3.40.20	3.51. 0	4. 2.28	4.15. 0	4.28.48	10
2.52.44	3.0. 48	3.9. 12	3.18. 0	3.28.20	3.37.20	3 47.52	3.59.12	4.11.36	4.25.20	5
2.50.16	2.58.12	3.6. 32	3.15.12	3.24.28	3.34.20	3.44.48	3.56. 0	4. 8.16	4.21.52	8
2.47.48	2.55.40	3.3. 52	3.12.28	3.21.36	3.32.20	3.41.44	3.52 48	4. 4.56	4.18.28	7
2.45.20	2.53. 8	3.1. 16	3. 9.44	3.18.44	3.28.24	3.38.40	3.49.40	4. 1.20	4.15. 4	6
2.42.56	2.50.36	2.58.36	3. 7. 0	3.15.56	3.25.28	3.30.36	3.46.28	3.58.24	4.11.40	5
2.40.47	2.48. 4	2.56. 0	3. 4.16	3.13. 4	3.22.32	3.32.32	3.43.20	3.55. 8	4. 8.16	4
2.38. 4	2 45.36	2.53.24	3. 1.30	3.10.16	3.19.36	3.29.32	3.40.12	3.51.52	4. 4.52	3
2.35.40	2.43. 4	2.50.48	2.58.52	3. 7.28	3.16.40	3.26.32	3.37. 4	3.48.36	4. 1.32	2
2.33.16	2.40.32	2.48.12	2.56. 8	3. 4.40	3.13.48	3.23.28	3.33.56	3.45.24	3.58.14	1
2.30.52	2.38. 4	2.45.36	2 53.28	3. 1.52	3.10.52	3.20,28	3.30.48	3.42. 8	3.54.48	0

Declinatio Meridiana ſupra Terram, & Septemtrionalis ſub Terra.

Tabu-

Tabula Poſitionum, & Directionum

Declinatio Septemtrionalis ſupra Terram, & Meridiana ſub Terra.

	Elevatio Poli.				
	41	42	43	44	44 29
	H.M.S.	H.M.S.	H.M.S.	H.M.S.	H.M.S.
32	6.20.40	6.42.48	7.9. 20	7.45.24	8.31.28
31	6.15. 0	6.36.52	7.3. 4	7.39.48	8.24.40
30	6.9. 32	6.31. 8	6.57. 8	7.33.24	8.18.12
29	6.4. 16	6.25.40	6.51.20	7.27.28	8.11.56
28	5.59. 8	6.20.24	6.45.44	7.21.32	8.5. 56
27	5.54.12	6.15.12	6.40.16	7.15.52	8.0. 8
26	5.49.24	6.10. 4	6.35.20	7.10.20	7.54.28
25	5.44.44	6.5. 12	6.29.56	7.5. 0	7.49. 0
24	5.40. 8	6.0. 24	6.24.50	6.59.48	7.43.40
23	5.35.40	5.55.44	6.20. 4	6.54.44	7.38.28
22	5.31.20	5.51.12	6.15.20	6.49.48	7.33.32
21	5.27. 4	5.46.44	6.10.44	6.45. 0	7.28.36
20	5.22.52	5.42.24	6.6. 8	6.40.16	7.23.48
19	5.18.44	5.38. 8	6.1. 44	6.35.36	7.19. 4
18	5.14.40	5.33.56	5.57.20	6.31. 4	7.14.28
17	5.10.44	5.29.48	5.5[illegible]. 4	6.26.36	7.9. 52
16	5.6. 48	5.25.44	5.49.52	6.22 16	7.5. 24
15	5.2. 56	5.21.44	5.44.40	6.17.56	7.1. 0
14	4.59. 8	5.17.44	5.40.36	6.13.40	6 56.40
13	4.55.24	5.13.52	5.36.32	6.9. 28	6.52.24
12	4 51.40	5.10. 0	5.32.32	6.5. 20	6.48.12
11	4.48. 0	5.6. 12	5.28.36	6.1. 12	6.44. 0
10	4.44.20	5.2. 24	5.24.40	5.57. 8	6.29.52
9	4.40.44	4.58.40	5.20 48	5.53. 8	6.35.48
8	4.37. 8	4 54 56	5.16.56	5.49.33	6.31.44
7	4.33.36	4.51.16	5.13. 4	5.45.12	6.27.44
6	4.30. 4	4.47.36	5.9. 16	5.41.16	6.23.44
5	4.26.32	4.43.36	5.5. 32	5.37.20	6.19.44
4	4.23. 0	4.40 20	5.1. 44	5.33.24	6.15.44
3	4.19.32	4.36.40	4.58. 0	5.29.32	6.11.48
2	4.16. 0	4.33. 4	4.54.16	5.25.40	6.7. 52
1	4.12.32	4.29.28	4.50.32	5.21.48	6.3. 56
0	4.9. 4	4.25.52	4.46.4[illegible]	5.17.56	6.0. •

Ad

Ad eleuationem Poli graduum 44. min. 29.

Eleuatio Poli.										
1	2	3	4	5	6	7	8	9	10	
H.I.M.	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	*H.I.M.*	
0. 4. 4	0. 8. 8	0.12.16	0 16.20	0.20.28	0.24.36	0.28.44	0.32.56	0.37. 8	0.41.24	0
0. 4. 0	0. 8. 0	0.12. 4	0 16. 4	0.20. 8	0.24.12	0.28.16	0.32.24	0.36.32	0.40 40	1
0. 3.56	0. 7.52	0.11.52	0.15.48	0.19.48	0.23.44	0.27.44	0.31.48	0.35.52	0.40. 0	2
0. 3.52	0. 7.44	0.11.36	0.15.28	0.19.24	0.23.20	0.27.16	0.31.16	0.35.12	0.39.16	3
0. 3.48	0. 7.36	0.11.24	0.15.12	0.19. 4	0.22.56	0.26.44	0.30.40	0.34.36	0.38.36	4
0. 3.44	0. 7.28	0.11.12	0.14.56	0.18.44	0.22.28	0.26.16	0.30. 8	0.33.56	0.37.52	5
0. 3.40	0. 7.16	0.11. 0	0.14.40	0.18.20	0.22. 4	0.25.48	0.29.32	0.33.20	0.37. 8	6
0 3.36	0. 7. 8	0.10.48	0.14.20	0.18. 0	0.21.40	0.25.16	0.29. 0	0.32.40	0.36.28	7
0. 3.32	0. 7. 0	0.10.32	0.14. 4	0.17.40	0.21.12	0.24.48	0.28.44	0.32. 4	0.35.44	8
0. 3.28	0. 6.52	0.10.20	0.13.48	0.17.16	0.20.48	0.24.16	0.27.52	0.31.24	0.35. 0	9
0. 3.20	0. 6.44	0.10. 8	0.13.34	0.16.50	0.20.20	0.23 48	0.27.16	0.30.44	0.34.16	10
0. 3.16	0. 6.36	0. 9.56	0.13 12	0.16.36	0.19.56	0.23.16	0.26.40	0.30. 4	0.33.32	11
0. 3.12	0. 6.28	0. 9.48	0.12.56	0.16.12	0.19.28	0.22.44	0.26. 4	0.29.24	0.32.48	12
0. 3. 8	0. 6.16	0. 9.28	0.12.36	0.15.52	0.19. 4	0.22.16	0.25.28	0.28.44	0.32. 4	13
0. 3. 4	0. 6. 8	0. 9.16	0.12.20	0.15.28	0.18.36	0.21.44	0.24.56	0.28. 4	0.31.20	14
0. 3. 0	0. 6. 0	0. 9. 4	0.12. 4	0.15. 4	0.18. 6	0.21.12	0.24.16	0.27.24	0.30.36	15
0. 2.56	0. 5.52	0. 8.48	0 11.44	0.14.44	0.17.40	0.20.40	0.23.40	0.26.44	0.29.48	16
0. 2.52	0. 5.40	0. 8.36	0.11.24	0.14.20	0.17.16	0.20. 8	0.23. 4	0.26. 0	0.29. 4	17
0. 2.48	0. 5.32	0. 3.20	0.11. 8	0 13.56	0.16.48	0.19.36	0.22.28	0.25.20	0.28.16	18
0. 2 40	0. 5.24	0. 8. 8	0.10.48	0.13.32	0.16 20	0.19. 4	0.21.52	0.24.36	0.27.28	19
0. 2.36	0. 5.12	0. 7.52	0.10.32	0.13.12	0.15.48	0.18.28	0.21.12	0.23.56	0.26.40	20
0. 2.32	0. 5. 4	0. 7.40	0.10.12	0.12.48	0.15.20	0.17 50	0.20.32	0.23.12	0.25.52	21
0. 2.28	0. 4.52	0. 7.24	0. 9.52	0.12.20	0.14.52	0.17.20	0.19.56	0.22.28	0.25. 4	22
0. 2.24	0. 4.44	0. 7. 8	0. 9.32	0.11.56	0.14.24	0.16.48	0.19.16	0.21.44	0.24.12	23
0. 2.16	0. 4.36	0. 6.56	0. 9.12	0.11.32	0.13.52	0.16.12	0.18.36	0.20.56	0.23.24	24
0. 2.12	0. 4.24	0. 6.40	0. 8.52	0.11. 8	0.13.20	0.15.36	0.17.56	0.20.12	0.22.32	25
0. 2. 8	0. 4.12	0. 6.24	0 8.32	0.10.40	0.12.52	0.15. 0	0.17.12	0.19.24	0.21.40	26
0. 2. 0	0. 4. 4	0. 6. 8	0. 8. 8	0.10.16	0.12.20	0.14.24	0.16.32	0.18.36	0.20.48	27
0. 1.56	0. 3.52	0. 5.52	0. 7.48	0. 9.48	0.11.48	0.13.44	0.15.48	0.17.48	0.19.52	28
0. 1.52	0. 3 40	0. 5.36	0. 7.28	0. 9.20	0.11.16	0.13. 8	0.15. 4	0.17. 0	0.18.56	29
0. 1.44	0. 3.32	0. 5.20	0. 7. 4	0. 8.52	0.10.40	0.12.28	0.14.20	0.16. 8	0.18. 0	30
0. 1.40	0. 3.20	0 5. 4	0. 6.44	0. 8.24	0.10. 8	0.11.48	0.13.32	0.15.16	0.17. 4	31
0. 1.36	0. 3. 8	0. 4.44	0. 6.20	0. 7.56	0. 9.32	0.11. 8	0.12.48	0.14.24	0.16. 4	32

Declinatio Meridiana ſuprà Terram, & Septemtrionalis ſub Terra.

Tabula Poſitionum, & Directionum.

Declinatio Meridiana ſupra Terram, & Septemtrionalis ſub Terra.

	Eleuatio Poli.									
	11	12	13	14	15	16	17	18	19	20
	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
0	0.45.40	0.50. 0	0.54 24	0.58.48	1. 3.20	1. 7.56	1.12 32	1.17.16	1.22 4	1.27. 0
1	0.44.52	0.49. 8	0.53.28	0.57.48	1. 2.15	1. 6.48	1.11.20	1.16. 0	1.20.40	1.25.32
2	0.44. 8	0.48.20	0.52.32	0.56.48	1. 1.12	1. 5.4	1.10. 4	1.14.40	1.19.20	1.24. 4
3	0.43.20	0 47.28	0.51.36	0.55.48	1. 0. 8	1. 4.28	1. 8.52	1.13.20	1.17.56	1.22.36
4	0 42.32	0.46.36	0.50.40	0.54.48	0.59. 4	1. 3.20	1. 7.36	1.12. 4	1.16.32	1.21.12
5	0 41.48	0.45.44	0.49.48	0.53.48	0.57.56	1. 2.12	1. 6.24	1.10.24	1.15. 8	1.19.44
6	0.41. 0	0.44.52	0.48.52	0.52.48	0.56.52	1. 1. 0	1. 5.12	1. 9.28	1.13 48	1.18.12
7	0.40.12	0.44. 0	0.47.56	0.51.48	0.55.48	0.59.52	1. 3.56	1. 8. 8	1.12.24	1.16.44
8	0.39.24	0.43. 8	0.46.56	0.50.48	0.54.44	0.58.40	1. 2.40	1. 6.48	1.11. 0	1.15.16
9	0. 8 36	0 42.16	0.46. 0	0.49.44	0.53.36	0.57.32	1. 1.24	1. 5.58	1. 9.32	1.13.48
10	0.37.48	0.41.42	0.45. 4	0.48.44	0.52.32	0.56.20	1. 0,12	1. 4. 8	1. 8. 8	1.12.16
11	0.37. 0	0.40.32	0.44. 8	0.47.40	0.51.24	0.55. 8	0.58.56	1. 2.48	1. 6.44	1.10.48
12	0 36.12	0.39.40	0.43. 8	0.46.44	0.50.16	0.53.56	0.57.36	1.1. .24	1.5. 16	1.9. 16
13	0.35.24	0.38.44	0.42.12	0.45.36	0.49. 8	0.52.44	0.56.20	1.0. 4	1.3. 48	1.7. 44
14	0.34.32	0.37 52	0.41.12	0.44.32	0. 48. 0	0.51.32	0.55. 4	0.58.40	1.2 .20	1.6. 12
15	0.33.44	0.36.56	0.40.12	0.43.28	0..46.52	0.50.20	0 53.44	0.57.16	1.0. 51	1.4 .36
16	0.32.59	0.36. 0	0.39.12	0 42.24	0.45.44	0.49. 4	0.52.24	0.55.52	0.59.24	1. 3. 4
17	0.32. 4	0.35. 4	0.38.12	0.41.20	0.44.32	0.47.48	0.51 4	0.54.28	0.57.56	1. 1.26
18	0.31.12	0.3 . 8	0.37.12	0.40.12	0.43.30	0.46.32	0.49.44	0.53. 0	0.56.24	0.59.52
19	0.30.20	0.33.12	0 36. 8	0.39. 8	0.42. 8	0.45.16	0.48.20	0.51.36	0.54.48	0.58.12
20	0.29 28	0.32.16	0.35. 8	0.38. 0	0.40.56	0.44. 0	0.47. 0	0.50. 8	0.53.16	0.56 52
21	0.28.32	0.31.16	0.34. 4	0.36.48	0.39.44	0.42.40	0.45.36	0.48.36	0.51.40	0.54.52
22	0.27.40	0.30.16	0.33. 0	0.35.40	0.38.28	0.41.20	0.44. 8	0.47. 4	0.50. 4	0.53.12
23	0.26.44	0 29.16	0.31.56	0.34.56	0.37.12	0.40. 0	0.4244.	0.45.32	0.48.28	0.51.28
24	0.25.48	0.28.16	0.30.48	0.33.16	0.35.56	0.38.36	0.41.16	0.44. 0	0.46.48	0.49.44
25	0.24.52	0.27.16	0.29.40	0.32. 4	0.34.36	0.37.12	0.39.44	0.42.24	0.45. 8	0.48.56
26	0.23.56	0.26.12	0.28.32	0.30.52	0.33.16	0.35.48	0.38.12	0.40.48	0.43.24	0.46. 4
27	0.22.56	0.25. 8	0.27.24	0.29.36	0.31.56	0.34.20	0.36.40	0.39. 8	0.41.40	0.43.16
28	0.21.56	0.24 4	0.26.12	0.28.20	0.30.36	0.32.52	0.34. 8	0.37.28	0. 39.52	0.42.24
29	0.20.56	0.22.56	0.25. 0	0.27. 0	0 29.12	0.31.20	0.33.32	0.35.44	0 .38. 4	0.40.28
30	0.19.52	0.21.48	0.23.44	0.25.40	0.27.44	0.29.48	0.31.52	0.34 0	0.36. 2	0.38.28
31	0.18.48	0.20.40	0.22.32	0.24.20	0.26.16	0.28.16	0.30.12	0.32.12	0.34.20	0.36.28
32	0.17.44	0.19.28	0.21.12	0.22.56	0.24.48	0.26.40	0.28.28	0.30.24	0.32.24	0.34.24

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Ad eleuationem Poli graduum 44. min. 29.

Eleuatio Poli.										
21	22	23	24	25	26	27	28	29	30	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	
1.32. 0	1.37. 8	1.42.24	1.47.48	1.53.24	1.59. 6	2. 5. 0	2.11. 8	2.17.28	2.24. 0	0
1.30.28	1.35.32	1.40.44	1.46. 0	1.51.32	1.57.14	2. 2.56	2. 9. 0	2.15.16	2.21.40	1
1.28.56	1.33.52	1.39. 0	1.44.16	1.49.40	1.55.16	2. 0.56	2. 6.52	2.13. 0	2.19.24	2
1.27 24	1.32.16	1.37.16	1.42.28	1.47.48	1.53.20	1.58.52	2. 4.44	2.10.4	2.17. 4	3
1.25.52	1.30.40	1.35.36	1.40.40	1.45.56	1.51.24	1.56.48	2. 2.36	2. 8.36	2.14.44	4
1.24.20	1.29. 0	1.33.52	1.38.52	1.44..4	1.49.24	1.54.48	2. 0.28	2. 6.20	2.12.24	5
1.22.24	1.27.24	1.32.12	1.37. 4	1.42. 8	1.47.24	1.52.44	1.58.20	2. 4. 8	2.10. 4	6
1.21.16	1.25.44	1.30.28	1.35.16	1.40.16	1.45.24	1.50.40	1. 56.8	2. 1.52	2. 7.44	7
1.19.36	1.24. 8	1.28.44	1.33.28	1.38.24	1.43.24	1.48.36	1.54. 0	1.59.36	2. 5.24	8
1.18. 4	1.22.28	1.27. 0	1.31.36	1 36.28	1.41.24	1.46.28	1.51.48	1.57.20	2. 3. 0	9
1.16.28	1.20.48	1.25 12	1.29.48	1.34.32	1.39.24	1.44.24	1.49.36	1.55. 0	2. 0.36	10
1.14.52	1.19. 8	1.23.28	1.27.56	1.32.36	1.37.24	1.42.56	1.47.24	1.52.44	1.58 12	11
1.13.16	1.17.24	1.21.40	1.26. 4	1.30 40	1.35.20	1.40. 8	1.45.12	1.50.24	1.55.48	12
1.11.40	1.15.44	1.19.52	1.24.12	1.28.40	1.33.16	1.38. 0	1.42.56	1.48. 4	1.53.20	13
1.10. 0	1.14. 0	1.18. 4	1.22.20	1.26.48	1.31.12	1.35.48	1.40.40	1 45.44	1.50.52	14
1. 8.20	1.12.16	1.16.16	1.20 28	1.24.40	1.29. 4	1.33.36	1.38.24	1.43.20	1.48.24	15
1. 6.44	1.10.32	1.14.28	1.18.28	1 22.40	1.26 56	1.31.24	1.36. 4	1 40.56	1.45.52	16
1. 5. 4	1. 8.44	1.12.36	1.16.32	1.20.36	1.24.48	1.29. 8	1.33.44	1.38.28	1.43.20	17
1. 3.20	1. 6.56	1.10.40	1.14.32	1.18.32	1.22.40	1.26.52	1.31.20	1.35.56	1.40.44	18
1. 1.36	1. 5. 8	1. 8.48	1.12.32	1.16.28	1.20.28	1.24.36	1.28.56	1.33.28	1.38. 8	19
0.59.52	1. 3.20	1. 6.52	1.10 32	1.14.2[illegible]	1.18.12	1.22.16	1.26 32	1.30.56	1.35.28	20
0.58. 0	1. 1.28	1. 4.52	1. 8.28	1.12. 8	1.15 56	1.19.52	1.24. 4	1.28.20	1.32.48	21
0 56.20	0.59 32	1. 2 52	1. 6.20	1. 9.56	1.13.40	1.17.28	1.21.32	1.25.44	1.30. 4	22
0.54.32	0.57.36	1. 0.52	1. 4 12	1. 7 44	1.11.20	1.15. 4	1.18.56	1.23. 0	1.27.1	23
0.52.40	0.55.40	0.58.48	1. 2. 4	1. 5.28	1. 8.56	1.12.32	1.16.20	1.20.16	1.24.24	24
0.50.44	0.53.40	0.56.44	0.59.52	1. 3. 8	1. 6.32	1.10. 0	1.13.41	1.17.32	1.21.32	25
0.48.48	0.51.40	0.54 36	0.57.36	1. 0.48	1. 4. 4	1. 7 28	1.11. 0	1.14.44	1.18.36	26
0.46.52	0.49.36	0.52.28	0.55 20	0.58.24	1. 1.16	1. 4.48	1. 8.16	1.11.52	1.15.36	27
0.44.52	0.47.32	0.50.12	0.53. 0	0.55.56	0.59. 0	1. 2. 8	1. 5.28	1. 8.56	1.12.28	28
0.42.52	0.45.24	0 47.56	0.[illegible]0.40	0.53.28	0.56.24	0.59.24	1. 2.36	1. 5 52	1. 9.20	29
0.40.48	0.43 12	0.45.40	0.48.12	0.50.56	0.53.44	0.56.36	0.59.36	1. 2.48	1. 6. 8	30
0.3[illegible].40	0.40.56	0.43.16	0.45.44	0 48 20	0.51. 0	0.53 40	0.56.36	0.59.40	1. 2.48	31
0.36.28	0.38.40	0.40.52	0.43.12	0 45 48	0.48. 8	0.50.44	0.53.32	0.56.24	0.59.24	32

Declinatio Meridiana ſupra Terram, & Septentrionalis ſub Terra.

Tabu-

Tabula Poſitionum, & Directionum.

Declinatio Meridiana ſupra Terram, & Septemtrionalis ſub Terra.

	Eleuatio Poli.									
	31	32	33	34	35	36	37	38	39	40
	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
0	2.30.52	2 38 4	2.45.36	2.53.28	3. 1.52	3.10.52	3.20.28	3.30.48	3.42 8	3.5 4.48
1	2.28.28	2.35.56	2.43. 0	2.50.48	2.59. 4	3. 7.57	3.17.28	3.37.40	3.38.52	3.5 1.28
2	2.26. 4	2.33 4	2.40.24	2.48. 4	2.56.16	3. 5. 4	3.14.24	3.24.32	3.35.40	3.48 4
3	2.23.40	2.30.32	2.37.48	2.45.20	2.53.28	3. 2. 8	3.11.24	3.21.24	3.32.24	3.44.44
4	2.21.16	2.28. 4	2.35.12	2.42.40	2.50.40	2.59.12	3. 8.24	3.18.16	3.29 8.	3.41.20
5	2.18.48	2.25.32	2.32.36	2.39.56	2.47.48	2.56.16	3. 5.20	3.15. 8	3.25.52	3.37.56
6	2.16.24	2.23. 0	2.29.56	2.37.12	2.45. 0	2.53.20	3.2. 16	3.11.56	3.22.56	3.34.32
7	2.13.56	2 20. 8	2.27.20	2.34.28	2.42. 8	2.50.24	2.59.12	3. 8.48	3.19.20	3.31. 8
8	2.11.28	2.17.56	2.24.40	2.31.44	2.39.16	2.47.24	2.56. 8	3. 5.36	3.16. 0	3.27.44
9	2. 9. 0	2.15.20	2.22. 0	2.28.56	2.36.24	2.44.24	2.53. 4	3. 2.24	3.12.40	3.24.16
10	2. 6.32	2.12.44	2.19.16	2.26. 8	2.33.28	2.41.24	2.49.56	2.59. 8	3.9. 16	3.20.48
11	2. 4. 4	2.10. 8	2.16.40	2.23.20	2.30.36	2.38.24	2.46.48	2.55.52	3. 5.56	3.17.16
12	2.1. 32	2.7. 32	2.13.52	2.20.28	2.27.36	2.35.20	2.43.36	2.52.32	3. 2.28	3.13.44
13	1.59. 0	2.4. 52	2.11. 8	2.17.36	2.24.40	2.32.16	2.40.24	2.49.12	2.59. 4	3.10. 8
14	1.56.24	2.2. 12	2. 8.20	2.14.44	2.21.40	2.29. 8	2.37. 8	2.45.52	2.55.32	3.6. 28
15	1.53.48	1.59.32	2. 5.32	2.11.48	2.18.36	2.25.16	2 33.52	2.42.28	2.52. 0	3. 2.48
16	1.51.12	1.56.48	2.2. 40	2. 8.52	2.15.32	2.22.44	2.30.32	2.39. 0	2.48.24	2.59. 8
17	1.48.37	1.54. 0	1.59.48	2. 5.52	2.12.24	2.19 32	2.27 12	2.35.32	2.44.48	2.55.20
18	1.45.48	1.51.12	1.56.52	2. 2.48	2. 9.16	2.16.15	2.23.48	2.32. 0	2.40. 8	2.51.32
19	1.43. 4	1.48.24	1.53.56	1.59.44	2. 6. 4	2.12.56	2.20.20	2.28.24	2.37.24	2.47.36
20	1.40 20	1.45.28	1.50.56	1.56.36	2. 2.48	2. 9.32	2.16.48	2.24.44	2.33.36	2.43.40
21	1.37.32	1.42.32	1.47.52	1.53.28	1.59.28	2. 6. 4	2.13.12	2.21. 0	2.29 40	2.39.40
22	1.34.40	1.39.36	1.44 24	1.50.12	1.56. 8	2. 2.32	2. 9.33	2.17.12	2.25.44	2.35.32
23	1.31.44	1 36.32	1.41.36	1.46.56	1.52.44	1.59. 0	2. 5.52	2.13.20	2 21.44	2.31.20
24	1.28.48	1.33.28	1.38.24	1.43.32	1.49.12	1.55.24	2. 2. 4	2. 9.24	2.17.16	2.27. 4
25	1.25.48	1.30.20	1.35. 4	1.40. 8	1.45.40	1.51.40	1.58.12	2. 5.24	2.13.24	2.22.40
26	1.22.41	1.27. 4	1.31.44	1.36.40	1.42. 0	1.47.52	1.54.12	2. 0.12	2. 9. 4	2.18. 8
27	1.19.32	1.23.48	1.28.20	1.33. 4	1.38.16	1.43.56	1.50 8	1.56.56	2. 4.40	2.13.32
28	1.16.20	1.20.28	1.24.48	1.29.24	1.34.28	1.40. 0	1.46. 0	1.52.36	2. 0. 8	2. 8.48
29	1.13. 4	1.17. 0	1.21.12	1.25.40	1.30.32	1.35.52	1.41.42	1.48. 8	1.55.28	2. 3.56
30	1. 9.40	1.13.28	1.17.32	1.21.48	1.26.28	1.31.40	1.37.20	1.43.32	1.50.46	1.58.52
31	1.6. 12	1. 9.52	1.13.44	1.17.48	1.22.20	1.27.20	1.32.48	1.38.48	1.45.40	1.53. 0
32	1. 2.40	1. 6. 8	1. 9 52	1.13.44	1.18. 4	1.22.52	1.28. 8	1.33.56	1.40.32	1.48.20

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Ad eleuationem Poli graduum 44. min. 29.

Eleuatio Poli.					
41	42	43	44	44 29	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	
4. 9. 4	4.25.52	4.46.48	5.17.56	6. 0. 0	0
4. 5.36	4 22.16	4.43. 4	5.14. 4	5.56. 4	1
4. 2. 8	4.18.40	4.39.20	5.10.12	5.52. 8	2
3.58.36	4.15. 4	4.35.36	5. 6.20	5.48.1.	3
3.55. 8	4.11.24	4.31.52	5. 2.28	5.44.16	4
3.51.36	4. 7.48	4.28. 4	4.58.32	5.40.16	5
3.48. 4	4. 4. 8	4.24.20	4.54.36	5.36.16	6
3.44.32	4. 0.28	4.20.32	4.50.40	5.32.16	7
3.41. 0	3.56.48	4.16.40	4 46.44	5.28.16	8
3.37.24	3.53. 4	4.12.48	4.42.44	5.24.12	8
3.33.48	3.49.20	4. 8.56	4.38 44	5.20. 8	10
3.30. 8	3.45.32	4. 5. 0	4.34.40	5.16. 0	11
3.26.28	3.42.44	4. 1. 4	4.30.32	5.11.48	12
3.22.44	3.37.52	3. 57.4	4 26.24	5. 7.36	13
3.19. 0	3.34. 0	3.53. 0	4.22.12	5. 3.20	14
3.15.12	3 30. 0	3.48.56	4.17.56	4.59. 0	15
3.11.20	3.26. 0	3.44.44	4.13.36	4.54.36	16
3. 7.24	3.21.56	3.40.32	4. 9.16	4.50. 8	17
3. 3.28	3.17.48	3.36.16	4. 4.48	4.45.3	16
2.59.24	3.13.36	3.31.52	4. 0.16	4.40.56	18
2.55.16	3. 9.20	3.27.28	3.55.36	4.36.12	20
2.51. 4	3. 5. 0	3.22.52	3.50.52	4.31.24	21
2.46.48	3. 0.32	3.18.16	3 46. 4	4.26.28	22
2.42.28	2.56. 0	3.13.32	3.41. 8	4.21.28	23
2.38. 0	2.51.20	3. 8.40	3.36. 4	4.16.16	24
2.33.24	2.46.32	3. 3.40	3.30.52	4.11. 0	25
2.28.44	2.41.40	2.58.36	3.25.32	4. 5.32	26
2.23.56	2.36.40	2.53.20	3.20. 0	3.59.52	27
2.19. 0	2.31.28	2.47.52	3.14.20	3.54. 8	28
2.13.52	2.26. 8	2.42.16	3. 8 28	3.48. 4	29
2. 8.36	2.20.36	2.36.28	3. 2.24	3.41.48	30
2. 3. 8	2.14.52	2.30.32	2.56. 4	3.35.20	31
1.57.28	2. 8.56	2.24.16	2.49.28	3.28.32	32

Declinatio Meridiana ſupra Terram ; & Septentrionalis ſub Terra.

Tabu-



TABVLÆ

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TABVLAE

ÆQVATIONVM DOMVS

VNDECIMÆ, ET TERTIÆ,

Vbi Cęleſtis Figura erigenda eſt ad Altitudinem Poli gr. 38. ſiuè 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55.

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ADDE

Horæ 22. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 14. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
2	0	1	0	2	0	2	0	3	0	3	0	4	0	5	0	6	0	6	58
4	0	2	0	3	0	4	0	6	0	6	0	7	0	9	0	11	0	12	56
6	0	3	0	5	0	7	0	9	0	11	0	11	0	14	0	16	0	18	54
8	0	4	0	6	0	9	0	12	0	13	0	15	0	18	0	21	0	24	52
10	0	5	0	8	0	11	0	14	0	16	0	19	0	23	0	26	0	30	50
12	0	6	0	9	0	13	0	16	0	19	0	22	0	27	0	32	0	35	48
14	0	7	0	10	0	15	0	18	0	22	0	26	0	32	0	36	0	41	46
16	0	8	0	11	0	17	0	20	0	25	0	30	0	36	0	41	0	47	44
18	0	9	0	13	0	19	0	22	0	28	0	34	0	40	0	46	0	53	42
20	0	10	0	14	0	20	0	24	0	31	0	37	0	44	0	51	0	58	40
22	0	11	0	16	0	22	0	27	0	34	0	41	0	48	0	56	1	4	38
24	0	12	0	17	0	24	0	29	0	37	0	45	0	52	1	2	1	9	36
26	0	14	0	19	0	26	0	32	0	40	0	49	0	57	1	6	1	15	34
28	0	15	0	20	0	28	0	35	0	43	0	52	1	1	1	11	1	20	32
30	0	16	0	22	0	30	0	38	0	46	0	56	1	5	1	16	1	26	30
32	0	17	0	23	0	32	0	40	0	49	0	59	1	9	1	20	1	31	28
34	0	18	0	25	0	34	0	42	0	52	1	3	1	13	1	25	1	37	26
36	0	19	0	26	0	35	0	44	0	55	1	6	1	17	1	29	1	42	24
38	0	20	0	28	0	37	0	47	0	58	1	10	1	21	1	34	1	48	22
40	0	21	0	29	0	39	0	49	1	1	1	13	1	25	1	38	1	53	20
42	0	22	0	31	0	41	0	52	1	4	1	17	1	29	1	43	1	59	18
44	0	23	0	32	0	42	0	54	1	7	1	20	1	33	1	47	2	4	16
46	0	24	0	34	0	44	0	57	1	10	1	24	1	37	1	52	2	9	14
48	0	25	0	35	0	46	0	59	1	13	1	27	1	41	1	56	2	14	12
50	0	26	0	37	0	48	1	2	1	16	1	31	1	45	2	1	2	20	10
52	0	27	0	38	0	50	1	4	1	18	1	34	1	49	2	6	2	25	8
54	0	28	0	40	0	52	1	6	1	21	1	38	1	54	2	11	2	31	6
56	0	29	0	41	0	54	1	8	1	24	1	41	1	58	2	15	2	36	4
58	0	31	0	43	0	56	1	11	1	27	1	44	2	2	2	20	2	41	2
60	0	32	0	44	0	57	1	13	1	20	1	47	2	6	2	25	2	46	0

SVBTRAHE

Horæ 21. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.
Horæ 13. Aſcenſionis rectæ Medij Cœli pro Domo Tertia.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli

Horæ 23. Aſcenſionis rectæ medij Cęli pro Domo Vndecima.
Horæ 15. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

M	G. M.	G. M.	G. M.	G. M.	G. M	G. M.	G. M.	G. M.	G. M.	M
0	1 1	0 53	0 44	0 35	0 25	0 15	0 5	0 7	0 19	60
2	1 3	0 55	0 46	0 36	0 26	0 16	0 6	0 7	0 20	58
4	1 5	0 57	0 47	0 37	0 27	0 16	0 6	0 7	0 20	56
6	1 7	0 59	0 49	0 39	0 28	0 17	0 6	0 7	0 21	54
8	1 9	1 0	0 50	0 40	0 29	0 17	0 6	0 7	0 21	52
10	1 11	1 2	0 51	0 41	0 30	0 18	0 6	0 8	0 22	50
12	1 12	1 3	0 52	0 42	0 30	0 18	0 6	0 8	0 22	48
14	1 14	1 5	0 53	0 43	0 31	0 18	0 6	0 8	0 23	46
16	1 16	1 6	0 54	0 43	0 31	0 18	0 6	0 8	0 24	44
18	1 18	1 8	0 55	0 44	0 32	0 19	0 6	0 9	0 25	42
20	1 19	1 9	0 56	0 45	0 32	0 19	0 6	0 9	0 25	40
22	1 21	1 11	0 58	0 46	0 33	0 20	0 7	0 9	0 25	38
24	1 23	1 12	0 59	0 47	0 33	0 20	0 7	0 9	0 26	36
26	1 25	1 14	1 1	0 48	0 34	0 20	0 7	0 9	0 26	34
28	1 26	1 15	1 2	0 49	0 34	0 20	0 7	0 9	0 26	32
30	1 28	1 17	1 3	0 50	0 35	0 21	0 7	0 10	0 26	30
32	1 29	1 18	1 4	0 51	0 36	0 21	0 7	0 10	0 27	28
34	1 31	1 19	1 5	0 52	0 37	0 22	0 8	0 10	0 27	26
36	1 32	1 20	1 6	0 53	0 38	0 22	0 8	0 10	0 27	24
38	1 34	1 22	1 7	0 54	0 39	0 23	0 8	0 10	0 27	22
40	1 35	1 23	1 8	0 54	0 39	0 23	0 8	0 10	0 28	20
42	1 36	1 24	1 9	0 55	0 40	0 24	0 8	0 11	0 28	18
44	1 37	1 25	1 10	0 55	0 40	0 24	0 8	0 11	0 28	16
46	1 39	1 26	1 11	0 56	0 41	0 25	0 9	0 11	0 29	14
48	1 40	1 27	1 12	0 56	0 41	0 25	0 9	0 11	0 29	12
50	1 41	1 28	1 13	0 57	0 42	0 26	0 9	0 11	0 29	10
52	1 42	1 29	1 14	0 57	0 42	0 26	0 9	0 11	0 30	8
54	1 44	1 30	1 15	0 58	0 43	0 27	0 9	0 11	0 30	6
56	1 45	1 31	1 16	0 59	0 43	0 27	0 9	0 11	0 30	4
58	1 46	1 32	1 17	1 0	0 44	0 27	0 10	0 11	0 31	2
60	1 47	1 33	1 18	1 0	0 44	0 27	0 10	0 11	0 31	0

	ADDE							SVBTRAHE		

Horæ 20. Aſcenſionis rectæ medij Celi pro Domo Vndecima.
Horæ 12. Aſcenſionis rectæ medij Celi pro Domo Tertia.

Ho-

Poli	47	48	49	50	51	52	53	54	55	Poli
	ADDE									
	Horæ 23. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.									
	Horæ 15. Aſcenſionis rectæ medij Cœli pro Domo Tertia.									
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 32	0 44	0 57	1 13	1 29	1 47	2 6	2 25	2 46	60
2	0 33	0 46	0 59	1 15	1 32	1 50	2 10	2 30	2 51	58
4	0 33	0 47	1 0	1 17	1 34	1 53	2 13	2 34	2 56	56
6	0 34	0 49	1 2	1 19	1 37	1 56	2 17	2 38	3 1	54
8	0 35	0 50	1 3	1 21	1 39	1 59	2 20	2 42	3 5	52
10	0 36	0 52	1 5	1 23	1 42	2 2	2 24	2 46	3 10	50
12	0 36	0 53	1 7	1 25	1 44	2 5	2 27	2 50	3 14	48
14	0 37	0 55	1 9	1 28	1 47	2 8	2 30	2 54	3 19	46
16	0 38	0 56	1 10	1 30	1 49	2 11	2 33	2 57	3 23	44
18	0 39	0 57	1 12	1 32	1 52	2 14	2 36	3 1	3 27	42
20	0 40	0 58	1 14	1 34	1 54	2 16	2 39	3 4	3 31	40
22	0 41	0 59	1 16	1 36	1 56	2 19	2 42	3 7	3 35	38
24	0 42	1 0	1 17	1 38	1 58	2 21	2 45	3 10	3 38	36
26	0 43	1 1	1 19	1 40	2 0	2 24	2 48	3 14	3 42	34
28	0 43	1 2	1 20	1 41	2 2	2 26	2 51	3 17	3 45	32
30	0 44	1 3	1 21	1 43	2 4	2 28	2 54	3 20	3 49	30
32	0 44	1 4	1 22	1 44	2 6	2 30	2 56	3 23	3 53	28
34	0 45	1 5	1 24	1 46	2 8	2 33	2 59	3 27	3 57	26
36	0 45	1 5	1 25	1 47	2 10	2 35	3 1	3 30	4 0	24
38	0 46	1 6	1 27	1 49	2 12	2 38	3 4	3 33	4 3	22
40	0 46	1 7	1 28	1 50	2 14	2 40	3 6	3 36	4 6	20
42	0 47	1 8	1 29	1 52	2 16	2 43	3 9	3 39	4 10	18
44	0 47	1 9	1 30	1 53	2 18	2 45	3 11	3 41	4 13	16
46	0 48	1 10	1 31	1 55	2 20	2 47	3 14	3 44	4 16	14
48	0 49	1 10	1 32	1 56	2 22	2 49	3 16	3 46	4 19	12
50	0 50	1 11	1 33	1 58	2 24	2 51	3 19	3 49	4 22	10
52	0 50	1 12	1 34	1 59	2 26	2 53	3 21	3 51	4 25	8
54	0 51	1 13	1 35	2 0	2 28	2 55	3 24	3 54	4 28	6
56	0 51	1 14	1 36	2 1	2 29	2 57	3 26	3 57	4 31	4
58	0 52	1 15	1 37	2 3	2 31	2 59	3 29	4 0	4 34	2
60	0 52	1 16	1 38	2 4	2 32	3 0	3 31	4 2	4 37	0

SVBTRAHE

Horæ 2[illegible] Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.
Horæ 12. Aſcenſionis rectæ Medij Cœli pro Domo Tertia.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli

Horæ o. Aſcenſionis rectæ medij Cęli pro Domo Vndecima.
Horæ 16. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

M	G. M.	G. M.	G. M.	G. M.	G. M	G. M.	G. M.	G. M.	G. M.	M
0	1 47	1 33	1 18	1 0	0 44	0 27	0 10	0 11	0 31	60
2	1 48	1 34	1 19	1 1	0 45	0 28	0 10	0 12	0 32	58
4	1 50	1 35	1 19	1 1	0 45	0 28	0 10	0 12	0 32	56
6	1 51	1 36	1 20	1 2	0 46	0 29	0 10	0 12	0 33	54
8	1 53	1 37	1 21	1 3	0 46	0 29	0 10	0 12	0 33	52
10	1 54	1 38	1 22	1 4	0 46	0 29	0 10	0 12	0 34	50
12	1 54	1 39	1 23	1 4	0 46	0 30	0 10	0 12	0 34	48
14	1 55	1 40	1 24	1 5	0 47	0 30	0 10	0 12	0 34	46
16	1 56	1 40	1 24	1 5	0 47	0 30	0 10	0 12	0 34	44
18	1 57	1 41	1 25	1 6	0 48	0 30	0 10	0 12	0 35	42
20	1 57	1 41	1 25	1 6	0 48	0 30	0 10	0 12	0 35	40
22	1 58	1 42	1 26	1 7	0 49	0 30	0 10	0 13	0 35	38
24	1 59	1 43	1 26	1 7	0 49	0 31	0 10	0 13	0 35	36
26	2 1	1 44	1 27	1 8	0 50	0 31	0 10	0 13	0 35	34
28	2 4	1 45	1 27	1 9	0 50	0 31	0 10	0 13	0 35	32
30	2 5	1 46	1 28	1 10	0 51	0 31	0 10	0 13	0 36	30
32	2 6	1 47	1 29	1 10	0 51	0 31	0 10	0 13	0 36	28
34	2 7	1 48	1 29	1 11	0 51	0 31	0 10	0 13	0 36	26
36	2 8	1 48	1 30	1 11	0 52	0 31	0 10	0 13	0 36	24
38	2 9	1 49	1 31	1 11	0 52	0 31	0 10	0 13	0 36	22
40	2 10	1 50	1 31	1 12	0 52	0 31	0 10	0 13	0 36	20
42	2 10	1 51	1 32	1 12	0 52	0 31	0 10	0 13	0 36	18
44	2 11	1 52	1 32	1 12	0 52	0 31	0 10	0 13	0 36	16
46	2 11	1 52	1 33	1 12	0 53	0 31	0 10	0 14	0 37	14
48	2 11	1 52	1 33	1 13	0 53	0 31	0 10	0 14	0 37	12
50	2 11	1 53	1 33	1 13	0 53	0 31	0 10	0 14	0 37	10
52	2 11	1 53	1 33	1 13	0 53	0 31	0 10	0 14	0 37	8
54	2 11	1 54	1 34	1 13	0 53	0 31	0 10	0 14	0 38	6
56	2 12	1 54	1 34	1 13	0 53	0 31	0 10	0 14	0 38	4
58	2 12	1 55	1 34	1 14	0 53	0 31	0 10	0 15	0 38	2
60	2 13	1 55	1 35	1 14	0 53	0 31	0 10	0 15	0 38	0
	ADDE							SVBTRAHE		

Horæ 19. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 11. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Ho-

A D D E

Poli	47		48		49		50		51		52		53		54		55		Poli
Horæ o. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima. Hora 16. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	52	1	16	1	38	2	4	2	32	3	0	3	31	4	2	4	37	60
2	0	53	1	17	1	40	2	6	2	34	3	2	3	33	4	5	4	40	58
4	0	53	1	18	1	41	2	7	2	35	3	4	3	35	4	7	4	42	56
6	0	54	1	19	1	42	2	9	2	36	3	6	3	37	4	9	4	43	54
8	0	54	1	19	1	43	2	10	2	37	3	7	3	39	4	11	4	46	52
10	0	55	1	20	1	44	2	12	2	39	3	9	3	41	4	13	4	49	50
12	0	55	1	21	1	45	2	12	2	40	3	10	3	42	4	14	4	51	48
14	0	56	1	2	1	46	2	13	2	42	3	12	3	44	4	16	4	54	46
16	0	56	1	22	1	47	2	14	2	43	3	13	3	45	4	18	4	56	44
18	0	57	1	23	1	48	2	15	2	44	3	15	3	47	4	20	4	58	42
20	0	57	1	23	1	49	2	16	2	45	3	16	3	48	4	22	5	0	40
22	0	57	1	23	1	50	2	17	2	46	3	17	3	49	4	24	5	2	38
24	0	58	1	24	1	50	2	18	2	47	3	18	3	50	4	25	5	4	36
26	0	58	1	24	1	51	2	19	2	48	3	19	3	52	4	27	5	6	34
28	0	58	1	24	1	51	2	19	2	48	3	20	3	53	4	28	5	7	32
30	0	59	1	25	1	52	2	20	2	49	3	21	3	55	4	30	5	9	30
32	0	59	1	25	1	52	2	21	2	50	3	22	3	56	4	31	5	10	28
34	0	59	1	26	1	53	2	22	2	51	3	23	3	58	4	33	5	12	26
36	0	59	1	26	1	53	2	23	2	52	3	24	3	59	4	54	5	13	24
38	1	0	1	27	1	54	2	24	2	53	3	25	4	0	4	36	5	14	22
40	1	0	1	27	1	54	2	24	2	53	3	26	4	1	4	37	5	15	20
42	1	0	1	28	1	55	2	25	2	54	3	27	4	2	4	38	5	17	18
44	1	0	1	28	1	56	2	26	2	55	3	28	4	3	4	39	5	18	16
46	1	1	1	29	1	57	2	27	2	56	3	29	4	4	4	41	5	19	14
48	1	1	1	29	1	57	2	27	2	57	3	30	4	5	4	42	5	20	12
50	1	2	1	30	1	58	2	28	2	58	3	31	4	6	4	43	5	22	10
52	1	2	1	30	1	58	2	28	2	59	3	32	4	7	4	44	5	23	8
54	1	3	1	30	1	59	2	29	3	0	3	33	4	8	4	45	5	24	6
56	1	3	1	31	1	59	2	29	3	0	3	34	4	9	4	46	5	25	4
58	1	3	1	31	2	0	2	30	3	1	3	35	4	10	4	47	5	26	2
60	1	4	1	31	2	0	2	30	3	1	3	35	4	11	4	48	5	27	0

S V B T R A H E

Horæ 19. Aſcenſionis rectæ Medij Cęli pro Domo Vndecima.
Horæ 11. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

Ho-

SVBTRAHE								ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli

Horæ 1. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.
Horæ 17. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	2 13	1 55	1 35	1 14	0 53	0 31	0 10	0 15	0 38	60
1	2 14	1 55	1 35	1 14	0 53	0 31	0 10	0 15	0 39	58
4	2 14	1 55	1 36	1 14	0 53	0 31	0 10	0 15	0 39	56
6	2 15	1 56	1 36	1 15	0 54	0 31	0 10	0 15	0 39	54
8	2 16	1 56	1 36	1 15	0 54	0 31	0 10	0 15	0 39	52
10	2 16	1 57	1 37	1 15	0 54	0 31	0 11	0 15	0 39	50
12	2 17	1 57	1 37	1 15	0 54	0 31	0 11	0 15	0 40	48
14	2 17	1 58	1 37	1 16	0 54	0 31	0 11	0 15	0 40	46
16	2 17	1 58	1 38	1 16	0 54	0 32	0 11	0 15	0 40	44
18	2 18	1 58	1 38	1 16	0 54	0 32	0 11	0 15	0 40	42
20	2 18	1 59	1 38	1 16	0 54	0 32	0 11	0 15	0 40	40
22	2 19	1 59	1 38	1 17	0 55	0 32	0 11	0 15	0 40	38
24	2 19	1 59	1 39	1 17	0 55	0 32	0 11	0 15	0 40	36
26	2 20	2 0	1 39	1 17	0 55	0 32	0 11	0 15	0 40	34
28	2 20	2 0	1 39	1 17	0 55	0 32	0 11	0 15	0 40	32
30	2 21	2 0	1 39	1 18	0 55	0 33	0 11	0 15	0 40	30
32	2 21	2 0	1 39	1 18	0 55	0 33	0 11	0 15	0 40	28
34	2 21	2 1	1 40	1 18	0 56	0 33	0 11	0 15	0 40	26
36	2 22	2 1	1 40	1 18	0 56	0 33	0 11	0 15	0 40	24
38	2 22	2 1	1 40	1 18	0 56	0 33	0 11	0 15	0 41	22
40	2 22	2 1	1 40	1 18	0 56	0 33	0 11	0 15	0 41	20
42	2 22	2 2	1 40	1 19	0 56	0 33	0 11	0 15	0 41	18
44	2 22	2 2	1 40	1 19	0 56	0 33	0 11	0 15	0 41	16
46	2 22	2 2	1 41	1 19	0 56	0 34	0 11	0 15	0 41	14
48	2 22	2 2	1 41	1 19	0 57	0 34	0 12	0 15	0 41	12
50	2 22	2 2	1 41	1 19	0 57	0 34	0 12	0 15	0 41	10
52	2 22	2 2	1 41	1 19	0 57	0 34	0 12	0 15	0 41	8
54	2 23	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 41	6
56	2 23	2 3	1 42	1 20	0 57	0 34	0 12	0 15	0 41	4
58	2 23	2 3	1 42	1 20	0 57	0 35	0 12	0 15	0 41	2
60	2 23	2 3	1 42	1 20	0 57	0 35	0 12	0 15	0 41	0
ADDE								SVBTRAHE		

Horæ 18. Aſcenſionis rectæ Medij Cęli pro Domo Vndecima.
Horæ 10. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

Ho-

ADDE

Poli	47		48		49		50		51		52		53		54		55		Poli
Horæ 1. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima. Hora 17. Aſcenſionis rectæ Medij Cęli pro Domò Tertia.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	1	4	1	31	2	0	2	30	3	1	3	35	4	11	4	48	5	27	60
2	1	4	1	31	2	0	2	31	3	2	3	36	4	12	4	48	5	28	58
4	1	4	1	32	2	1	2	31	3	2	3	36	4	12	4	49	5	28	56
6	1	4	1	32	2	1	2	31	3	3	3	37	4	13	4	49	5	29	54
8	1	4	1	32	2	1	2	31	3	3	3	37	4	13	4	49	5	29	52
10	1	5	1	32	2	1	2	32	3	4	3	38	4	14	4	50	5	30	50
12	1	5	1	32	2	2	2	32	3	4	3	38	4	14	4	50	5	30	48
14	1	5	1	32	2	2	2	32	3	4	3	39	4	15	4	51	5	31	46
16	1	5	1	32	2	2	2	32	3	4	3	39	4	15	4	51	5	32	44
18	1	5	1	33	2	2	2	33	3	5	3	39	4	15	4	52	5	33	42
20	1	5	1	33	2	2	2	33	3	5	3	40	4	15	4	52	5	33	40
22	1	6	1	33	2	3	2	33	3	5	3	40	4	16	4	53	5	34	38
24	1	6	1	33	2	3	2	34	3	5	3	40	4	16	4	53	5	34	36
26	1	6	1	33	2	3	2	34	3	5	3	41	4	16	4	54	5	34	34
28	1	6	1	33	2	3	2	34	3	6	3	41	4	16	4	54	5	35	32
30	1	6	1	34	2	3	2	35	3	6	3	41	4	16	4	54	5	35	30
32	1	6	1	34	2	3	2	35	3	6	3	42	4	17	4	55	5	35	28
34	1	6	1	34	2	3	2	35	3	7	3	42	4	17	4	55	5	35	26
36	1	6	1	34	2	4	2	35	3	7	3	42	4	17	4	55	5	35	24
38	1	7	1	34	2	4	2	35	3	7	3	43	4	17	4	55	5	35	22
40	1	7	1	34	2	4	2	36	3	7	3	43	4	17	4	55	5	35	20
42	1	7	1	34	2	4	2	36	3	7	3	43	4	17	4	55	5	35	18
44	1	7	1	34	2	4	2	36	3	8	3	43	4	17	4	55	5	35	16
46	1	7	1	34	2	4	2	36	3	8	3	43	4	17	4	55	5	35	14
48	1	7	1	35	2	4	2	36	3	8	3	42	4	17	4	55	5	35	12
50	1	7	1	35	2	4	2	36	3	8	3	42	4	17	4	55	5	35	10
52	1	7	1	35	2	4	2	36	3	8	3	42	4	17	4	55	5	35	8
54	1	7	1	35	2	4	2	36	3	8	3	42	4	17	4	54	5	34	6
56	1	7	1	35	2	4	2	35	3	8	3	41	4	17	4	54	5	34	4
58	1	7	1	35	2	4	2	35	3	8	3	41	4	17	4	54	5	34	2
60	1	7	1	35	2	4	2	35	3	8	3	41	4	17	4	54	5	34	0

SVBTRAHE

Horæ 18. Aſcenſionis rectæ Medij Cęli pro Domo Vndecima.
Horæ 10. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

Ho-

	SVBTRAHE							ADDE	
Poli	38	39	40	41	42	43	44	45	46	Poli

Horæ 2. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 18. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	2 23	2 3	1 42	1 20	0 57	0 35	0 12	0 15	0 41	60
2	2 23	2 3	1 42	1 20	0 57	0 35	0 12	0 15	0 41	58
4	2 23	2 3	1 42	1 20	0 57	0 35	0 12	0 15	0 41	56
6	2 24	2 4	1 42	1 20	0 57	0 35	0 12	0 15	0 41	54
8	2 24	2 4	1 42	1 20	0 57	0 35	0 12	0 15	0 41	52
10	2 24	2 4	1 42	1 20	0 57	0 35	0 12	0 15	0 41	50
12	2 24	2 4	1 42	1 20	0 57	0 35	0 12	0 15	0 41	48
14	2 24	2 4	1 42	1 20	0 57	0 35	0 12	0 15	0 41	46
16	2 24	2 4	1 42	1 20	0 57	0 35	0 12	0 15	0 40	44
18	2 24	2 4	1 42	1 20	0 57	0 35	0 12	0 15	0 40	42
20	2 23	2 4	1 42	1 19	0 57	0 34	0 12	0 15	0 40	40
22	2 23	2 4	1 42	1 19	0 57	0 34	0 12	0 15	0 40	38
24	2 23	2 4	1 42	1 19	0 57	0 34	0 12	0 15	0 40	36
26	2 23	2 4	1 42	1 19	0 57	0 34	0 12	0 15	0 40	34
28	2 23	2 4	1 42	1 19	0 57	0 34	0 12	0 15	0 40	32
30	2 23	2 3	1 42	1 19	0 57	0 34	0 12	0 15	0 40	30
32	2 23	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 40	28
34	2 23	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 40	26
36	2 23	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 40	24
38	2 23	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 40	22
40	2 22	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 39	20
42	2 22	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 39	18
44	2 22	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 39	16
46	2 22	2 3	1 41	1 19	0 57	0 34	0 12	0 15	0 39	14
48	2 22	2 2	1 40	1 18	0 57	0 34	0 12	0 15	0 39	12
50	2 22	2 2	1 40	1 18	0 57	0 34	0 12	0 15	0 39	10
52	2 22	2 2	1 40	1 18	0 57	0 34	0 12	0 15	0 39	8
54	2 22	2 2	1 40	1 18	0 57	0 34	0 12	0 15	0 39	6
56	2 21	2 2	1 40	1 18	0 57	0 34	0 12	0 14	0 38	4
58	2 21	2 2	1 40	1 18	0 57	0 34	0 12	0 14	0 38	2
60	2 21	2 2	1 40	1 18	0 57	0 34	0 12	0 14	0 38	0

	ADDE							SVBTRAHE	

Horæ 17. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 9. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Horæ

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 2. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima. Horæ 18. Aſcenſionis rectæ Medij Cęli pro Domó Tertia.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	1 7	1 35	2 5	2 35	3 8	3 41	4 17	4 54	5 34	60
2	1 7	1 35	2 4	2 35	3 8	3 41	4 17	4 54	5 34	58
4	1 7	1 35	2 4	2 35	3 7	3 41	4 17	4 54	5 33	56
6	1 7	1 35	2 4	2 35	3 7	3 41	4 16	4 54	5 33	54
8	1 7	1 35	2 4	2 35	3 7	3 40	4 16	4 53	5 32	52
10	1 7	1 35	2 4	2 35	3 7	3 40	4 16	4 53	5 32	50
12	1 6	1 35	2 4	2 35	3 7	3 40	4 16	4 53	5 32	48
14	1 6	1 35	2 4	2 35	3 7	3 40	4 16	4 53	5 32	46
16	1 6	1 35	2 4	2 34	3 7	3 40	4 15	4 52	5 31	44
18	1 6	1 35	2 4	2 34	3 7	3 40	4 15	4 52	5 31	42
20	1 6	1 34	2 4	2 34	3 7	3 40	4 15	4 52	5 31	40
22	1 6	1 34	2 3	2 34	3 6	3 39	4 15	4 52	5 30	38
24	1 6	1 34	2 3	2 34	3 6	3 39	4 14	4 51	5 30	36
26	1 6	1 34	2 3	2 34	3 6	3 39	4 14	4 51	5 30	34
28	1 6	1 34	2 3	2 34	3 6	3 39	4 14	4 51	5 29	32
30	1 6	1 34	2 3	2 34	3 6	3 39	4 14	4 50	5 29	30
32	1 6	1 34	2 3	2 33	3 5	3 38	4 13	4 50	5 28	28
34	1 6	1 34	2 3	2 33	3 5	3 38	4 13	4 50	5 28	26
36	1 5	1 34	2 3	2 33	3 5	3 38	4 13	4 49	5 27	24
38	1 5	1 34	2 3	2 33	3 4	3 37	4 12	4 49	5 27	22
40	1 5	1 34	2 2	2 33	3 4	3 37	4 12	4 48	5 26	20
42	1 5	1 34	2 2	2 33	3 4	3 37	4 12	4 48	5 26	18
44	1 5	1 34	2 2	2 33	3 3	3 36	4 11	4 47	5 25	16
46	1 5	1 34	2 2	2 32	3 3	3 36	4 11	4 47	5 24	14
48	1 5	1 34	2 2	2 32	3 3	3 35	4 10	4 46	5 23	12
50	1 5	1 33	2 1	2 32	3 2	3 35	4 10	4 46	5 22	10
52	1 5	1 33	2 1	2 32	3 2	3 34	4 9	4 45	5 21	8
54	1 5	1 33	2 1	2 32	3 2	3 34	4 8	4 44	5 20	6
56	1 5	1 33	2 0	2 31	3 1	3 33	4 7	4 43	5 19	4
58	1 4	1 33	2 0	2 31	3 1	3 33	4 7	4 42	5 18	2
60	1 4	1 33	1 59	2 31	3 0	3 32	4 6	4 41	5 17	0

SVBTRAHE

Horæ 17. Aſcenſionis rectæ Medij Cęli pro Domo Vndecima.
Horæ 9. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

	SVBTRAHE															ADDE			
Poli	38		39		40		41		42		43		44		45		46		Poli

Horæ 3. Aſcenſionis rectæ medij Cęli pro Domo Vndecima.
Horæ 19. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	21	2	2	1	40	1	18	0	57	0	34	0	12	0	14	0	38	60
2	2	21	2	2	1	40	1	18	0	57	0	34	0	12	0	14	0	38	58
4	2	21	2	1	1	40	1	18	0	57	0	34	0	12	0	14	0	38	56
6	2	20	2	1	1	40	1	18	0	57	0	34	0	12	0	14	0	38	54
8	2	20	2	1	1	40	1	17	0	56	0	34	0	12	0	14	0	38	52
10	2	20	2	1	1	39	1	17	0	56	0	34	0	12	0	14	0	38	50
12	2	19	2	0	1	39	1	17	0	56	0	33	0	11	0	14	0	38	48
14	2	19	2	0	1	39	1	17	0	56	0	33	0	11	0	14	0	38	46
16	2	19	1	59	1	39	1	17	0	56	0	33	0	11	0	14	0	38	44
18	2	18	1	59	1	39	1	17	0	56	0	33	0	11	0	14	0	38	42
20	2	18	1	58	1	38	1	16	0	56	0	33	0	11	0	14	0	38	40
22	2	18	1	58	1	38	1	16	0	56	0	33	0	11	0	14	0	38	38
24	2	18	1	58	1	38	1	16	0	55	0	33	0	11	0	14	0	38	36
26	2	17	1	58	1	38	1	16	0	55	0	33	0	11	0	14	0	38	34
28	2	17	1	57	1	37	1	16	0	55	0	32	0	11	0	14	0	38	32
30	2	17	1	57	1	37	1	16	0	55	0	32	0	11	0	14	0	38	30
32	2	16	1	57	1	37	1	16	0	55	0	32	0	11	0	1	0	37	28
34	2	16	1	57	1	37	1	16	0	55	0	32	0	11	0	14	0	37	26
36	2	16	1	56	1	37	1	15	0	54	0	32	0	11	0	14	0	37	24
38	2	16	1	56	1	37	1	15	0	54	0	32	0	11	0	14	0	37	22
40	2	16	1	56	1	36	1	15	0	54	0	32	0	11	0	14	0	37	20
42	2	15	1	56	1	36	1	15	0	54	0	32	0	11	0	14	0	37	18
44	2	15	1	56	1	36	1	15	0	54	0	31	0	11	0	14	0	37	16
46	2	15	1	55	1	36	1	15	0	54	0	31	0	11	0	14	0	37	14
48	2	15	1	55	1	35	1	15	0	54	0	31	0	11	0	14	0	37	12
50	2	14	1	55	1	3	1	14	0	54	0	31	0	11	0	14	0	37	10
52	2	14	1	55	1	35	1	14	0	53	0	31	0	11	0	14	0	37	8
54	2	14	1	54	1	35	1	14	0	53	0	31	0	11	0	14	0	37	6
56	2	13	1	54	1	34	1	14	0	53	0	31	0	11	0	14	0	37	4
58	2	13	1	54	1	34	1	13	0	53	0	31	0	11	0	14	0	37	2
60	2	12	1	53	1	34	1	13	0	53	0	31	0	11	0	14	0	37	0
	ADDE															SVBTRAHE			

Horæ 16. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 8. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Ho-

A D D E

Horæ 3. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.
Horæ 19. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	1	4	1	33	1	59	2	31	3	0	3	32	4	6	4	41	5	17	60
2	1	4	1	33	1	59	2	31	3	0	3	32	4	6	4	40	5	17	58
4	1	4	1	32	1	59	2	30	2	59	3	31	4	5	4	39	5	16	56
6	1	4	1	32	1	59	2	30	2	59	3	31	4	5	4	39	5	15	54
8	1	4	1	32	1	59	2	30	2	59	3	30	4	4	4	38	5	14	52
10	1	4	1	32	1	59	2	30	2	59	3	30	4	4	4	37	5	14	50
12	1	4	1	32	1	58	2	29	2	58	3	29	4	3	4	36	5	13	48
14	1	4	1	32	1	58	2	29	2	58	3	29	4	3	4	36	5	12	46
16	1	3	1	31	1	58	2	29	2	58	3	28	4	2	4	35	5	11	44
18	1	3	1	31	1	58	2	29	2	57	3	28	4	2	4	35	5	11	42
20	1	3	1	31	1	58	2	28	2	57	3	27	4	1	4	34	5	10	40
22	1	3	1	31	1	58	2	28	2	57	3	27	4	0	4	33	5	9	38
24	1	3	1	31	1	57	2	28	2	56	3	26	3	59	4	32	5	8	36
26	1	3	1	31	1	57	2	27	2	56	3	26	3	59	4	32	5	8	34
28	1	3	1	30	1	57	2	27	2	55	3	25	3	58	4	31	5	7	32
30	1	2	1	30	1	57	2	27	2	54	3	25	3	58	4	30	5	6	30
32	1	2	1	30	1	56	2	26	2	53	3	24	3	57	4	29	5	5	28
34	1	2	1	30	1	56	2	26	2	53	3	24	3	56	4	29	5	4	26
36	1	2	1	29	1	56	2	25	2	52	3	23	3	55	4	28	5	3	24
38	1	2	1	29	1	56	2	25	2	52	3	23	3	54	4	27	5	2	22
40	1	1	1	28	1	55	2	24	2	51	3	22	3	53	4	26	5	1	20
42	1	1	1	28	1	55	2	24	2	51	3	22	3	53	4	26	5	0	18
44	1	1	1	27	1	55	2	23	2	50	3	21	3	52	4	25	4	59	16
46	1	1	1	27	1	55	2	23	2	50	3	20	3	52	4	24	4	58	14
48	1	1	1	26	1	54	2	22	2	49	3	19	3	51	4	23	4	56	12
50	1	1	1	26	1	54	2	22	2	49	3	19	3	50	4	22	4	55	10
52	1	0	1	26	1	53	2	21	2	48	3	18	3	49	4	21	4	54	8
54	1	0	1	26	1	53	2	21	2	48	3	18	3	49	4	20	4	53	6
56	1	0	1	25	1	52	2	20	2	47	3	17	3	48	4	19	4	52	4
58	1	0	1	25	1	52	2	20	2	47	3	17	3	48	4	19	4	51	2
60	1	0	1	25	1	52	2	19	2	46	3	16	3	47	4	18	4	50	0

S V B T R A H E

Horæ 16. Aſcenſionis rectæ Medij Cęli pro Domo Vndecima.
Horæ 8. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

Horæ 4. Aſcenſionis rectæ medij Cęli pro Domo Vndecima.
Horæ 20. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

	SVBTRAHE														ADDE				
Poli	38		39		40		41		42		43		44		45		46		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	12	1	53	1	34	1	13	0	53	0	31	0	11	0	14	0	37	60
2	2	12	1	53	1	34	1	13	0	53	0	31	0	11	0	14	0	37	58
4	2	11	1	53	1	33	1	13	0	53	0	31	0	11	0	14	0	37	56
6	2	11	1	52	1	33	1	12	0	52	0	31	0	11	0	14	0	37	54
8	2	11	1	52	1	32	1	12	0	52	0	30	0	11	0	14	0	36	52
10	2	10	1	52	1	32	1	12	0	52	0	30	0	11	0	14	0	36	50
12	2	10	1	51	1	32	1	12	0	52	0	30	0	11	0	14	0	36	48
14	2	10	1	51	1	32	1	11	0	52	0	30	0	11	0	14	0	36	46
16	2	9	1	50	1	31	1	11	0	51	0	30	0	11	0	14	0	36	44
18	2	9	1	50	1	31	1	11	0	51	0	30	0	11	0	14	0	36	42
20	2	9	1	50	1	31	1	11	0	51	0	30	0	11	0	14	0	36	40
22	2	8	1	49	1	31	1	10	0	51	0	30	0	11	0	14	0	36	38
24	2	8	1	49	1	30	1	10	0	50	0	30	0	10	0	14	0	36	36
26	2	8	1	49	1	30	1	10	0	50	0	30	0	10	0	13	0	36	34
28	2	7	1	48	1	30	1	10	0	50	0	29	0	10	0	13	0	35	32
30	2	7	1	48	1	30	1	9	0	50	0	29	0	10	0	13	0	35	30
32	2	7	1	48	1	29	1	9	0	49	0	29	0	10	0	13	0	35	28
34	2	6	1	48	1	29	1	9	0	49	0	29	0	10	0	13	0	35	26
36	2	6	1	47	1	29	1	9	0	49	0	29	0	10	0	13	0	35	24
38	2	6	1	47	1	28	1	8	0	49	0	29	0	10	0	13	0	35	22
40	2	5	1	47	1	28	1	8	0	49	0	29	0	10	0	13	0	35	20
42	2	5	1	47	1	28	1	8	0	49	0	29	0	10	0	13	0	34	18
44	2	4	1	46	1	27	1	8	0	48	0	29	0	10	0	13	0	34	16
46	2	4	1	46	1	27	1	8	0	48	0	29	0	10	0	13	0	34	14
48	2	3	1	45	1	27	1	7	0	48	0	29	0	10	0	13	0	34	12
50	2	3	1	45	1	26	1	7	0	48	0	29	0	10	0	12	0	33	10
52	2	2	1	44	1	26	1	7	0	48	0	29	0	10	0	12	0	33	8
54	2	2	1	44	1	26	1	7	0	48	0	29	0	10	0	12	0	33	6
56	2	1	1	43	1	25	1	6	0	47	0	28	0	10	0	12	0	33	4
58	2	1	1	43	1	25	1	6	0	47	0	28	0	10	0	12	0	32	2
60	2	0	1	43	1	24	1	6	0	47	0	28	0	10	0	12	0	32	0
	ADDE														SVBTRAHE				

Horæ 15. Aſcenſionis rectæ medij Cęli pro Domo Vndecima.
Horæ 7. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

ADDE

Poli	47		48		49		50		51		52		53		54		55		Poli
Horæ 4 Aſcenſionis rectæ Medij Cœli pro Domo Vndecima. Horæ 20. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	1	0	1	25	1	52	2	19	2	46	3	16	3	47	4	18	4	50	60
2	1	0	1	25	1	52	2	19	2	46	3	16	3	46	4	17	4	49	58
4	1	0	1	25	1	51	2	18	2	45	3	15	3	45	4	16	4	48	56
6	1	0	1	25	1	51	2	18	2	45	3	14	3	44	4	15	4	47	54
8	0	59	1	24	1	51	2	17	2	44	3	13	3	43	4	13	4	46	52
10	0	59	1	24	1	51	2	17	2	44	3	13	3	43	4	12	4	45	50
12	0	59	1	24	1	50	2	16	2	43	3	12	3	42	4	11	4	44	48
14	0	59	1	24	1	50	2	16	2	43	3	12	3	41	4	10	4	43	46
16	0	59	1	24	1	50	2	15	2	42	3	11	3	40	4	9	4	42	44
18	0	59	1	24	1	49	2	15	2	42	3	10	3	39	4	8	4	41	42
20	0	58	1	23	1	49	2	14	2	41	3	9	3	38	4	7	4	40	40
22	0	58	1	23	1	49	2	14	2	41	3	9	3	37	4	6	4	39	38
24	0	58	1	23	1	48	2	13	2	40	3	8	3	36	4	5	4	37	36
26	0	58	1	23	1	48	2	13	2	40	3	8	3	35	4	4	4	36	34
28	0	58	1	22	1	47	2	12	2	39	3	7	3	34	4	3	4	35	32
30	0	58	1	22	1	47	2	12	2	38	3	6	3	33	4	2	4	34	30
32	0	58	1	21	1	46	2	11	2	37	3	5	3	32	4	1	4	33	28
34	0	57	1	21	1	46	2	11	2	37	3	4	3	31	4	0	4	32	26
36	0	57	1	20	1	45	2	10	2	36	3	3	3	30	3	59	4	31	24
38	0	57	1	20	1	45	2	10	2	35	3	2	3	29	3	58	4	30	22
40	0	57	1	19	1	44	2	9	2	34	3	1	3	28	3	57	4	28	20
42	0	57	1	19	1	44	2	9	2	34	3	1	3	28	3	56	4	27	18
44	0	57	1	19	1	43	2	8	2	33	3	0	3	27	3	55	4	26	16
46	0	56	1	19	1	43	2	8	2	33	2	59	3	26	3	54	4	25	14
48	0	56	1	18	1	42	2	7	2	32	2	58	3	25	3	53	4	24	12
50	0	56	1	18	1	42	2	6	2	32	2	58	3	24	3	52	4	23	10
52	0	56	1	18	1	41	2	5	2	31	2	57	3	23	3	51	4	21	8
54	0	56	1	18	1	41	2	5	2	30	2	56	3	22	3	50	4	20	6
56	0	55	1	17	1	40	2	4	2	29	2	55	3	21	3	49	4	19	4
58	0	55	1	17	1	40	2	4	2	29	2	54	3	20	3	48	4	18	2
60	0	55	1	16	1	39	2	3	2	28	2	53	3	19	3	47	4	16	0

SVBTRAHE

Horæ 15. Aſcenſionis rectæ Medij Cęli pro Domo Vndecima.
Horæ 7. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

Ho-

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
	Horæ 5. Aſcenſionis rectæ medij Cœli pro Domo Vndecima. Horæ 21. Aſcenſionis rectæ medij Cęli pro Domo Tertia.									
M	G. M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	2 0	1 43	1 24	1 6	0 47	0 28	0 10	0 12	0 32	60
2	2 0	1 43	1 24	1 6	0 47	0 28	0 10	0 12	0 32	58
4	1 59	1 42	1 24	1 5	0 47	0 28	0 10	0 12	0 32	56
6	1 59	1 42	1 24	1 5	0 47	0 28	0 10	0 12	0 32	54
8	1 59	1 42	1 23	1 5	0 47	0 27	0 10	0 12	0 31	52
10	1 58	1 41	1 23	1 5	0 47	0 27	0 10	0 12	0 31	50
12	1 58	1 41	1 23	1 5	0 47	0 27	0 10	0 11	0 31	48
14	1 58	1 41	1 23	1 4	0 46	0 27	0 10	0 11	0 31	46
16	1 57	1 40	1 22	1 4	0 46	0 27	0 10	0 11	0 31	44
18	1 56	1 40	1 22	1 4	0 46	0 27	0 10	0 11	0 31	42
20	1 55	1 39	1 22	1 4	0 46	0 27	0 9	0 11	0 30	40
22	1 55	1 39	1 22	1 3	0 46	0 27	0 9	0 11	0 30	38
24	1 54	1 38	1 21	1 3	0 45	0 26	0 9	0 11	0 30	36
26	1 54	1 38	1 21	1 3	0 45	0 26	0 9	0 11	0 30	34
28	1 53	1 37	1 21	1 3	0 45	0 26	0 9	0 11	0 30	32
30	1 53	1 37	1 20	1 2	0 45	0 26	0 9	0 10	0 30	30
32	1 52	1 37	1 20	1 2	0 44	0 26	0 9	0 10	0 29	28
34	1 52	1 36	1 20	1 2	0 44	0 26	0 9	0 10	0 29	26
36	1 51	1 36	1 19	1 2	0 44	0 26	0 9	0 10	0 29	24
38	1 51	1 36	1 19	1 2	0 44	0 26	0 9	0 10	0 29	22
40	1 50	1 35	1 18	1 1	0 43	0 26	0 9	0 10	0 29	20
42	1 50	1 35	1 18	1 1	0 43	0 26	0 9	0 10	0 29	18
44	1 49	1 34	1 18	1 1	0 43	0 26	0 9	0 10	0 28	16
46	1 49	1 33	1 17	1 1	0 43	0 26	0 9	0 10	0 28	14
48	1 48	1 32	1 17	1 0	0 42	0 25	0 9	0 9	0 28	12
50	1 48	1 32	1 17	1 0	0 42	0 25	0 9	0 9	0 28	10
52	1 47	1 31	1 16	0 59	0 42	0 25	0 9	0 9	0 28	8
54	1 46	1 30	1 16	0 59	0 42	0 25	0 9	0 9	0 28	6
56	1 45	1 29	1 15	0 58	0 41	0 25	0 9	0 9	0 28	4
58	1 45	1 29	1 15	0 58	0 41	0 25	0 9	0 9	0 27	2
60	1 44	1 29	1 14	0 58	0 41	0 25	0 9	0 9	0 27	0
	ADDE							SVBTRAHE		

Horæ 14. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 6. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Horæ

ADDE

Horæ 5. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 21. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	55	1	16	1	39	2	3	2	28	2	53	3	19	3	47	4	16	60
2	0	55	1	16	1	39	2	3	2	27	2	52	3	18	3	46	4	15	58
4	0	54	1	15	1	38	2	2	2	26	2	51	3	17	3	44	4	13	56
6	0	54	1	15	1	38	2	1	2	25	2	50	3	16	3	43	4	12	54
8	0	53	1	14	1	37	2	0	2	24	2	49	3	15	3	42	4	11	52
10	0	53	1	14	1	36	2	0	2	23	2	48	3	14	3	41	4	10	50
12	0	52	1	13	1	35	1	59	2	22	2	47	3	13	3	39	4	8	48
14	0	52	1	13	1	35	1	58	2	21	2	46	3	12	3	38	4	7	46
16	0	51	1	12	1	34	1	57	2	20	2	45	3	11	3	36	4	5	44
18	0	51	1	12	1	34	1	57	2	20	2	45	3	10	3	35	4	4	42
20	0	50	1	12	1	33	1	56	2	19	2	44	3	9	3	34	4	2	40
22	0	50	1	11	1	33	1	56	2	19	2	43	3	8	3	33	4	1	38
24	0	49	1	11	1	32	1	55	2	18	2	42	3	7	3	31	4	0	36
26	0	49	1	11	1	32	1	55	2	18	2	42	3	6	3	30	3	59	34
28	0	49	1	10	1	31	1	54	2	17	2	41	3	5	3	29	3	57	32
30	0	48	1	10	1	31	1	54	2	16	2	40	3	4	3	28	3	56	30
32	0	48	1	9	1	30	1	53	2	15	2	39	3	3	3	26	3	54	28
34	0	48	1	9	1	30	1	52	2	14	2	38	3	2	3	25	3	53	26
36	0	47	1	8	1	29	1	51	2	13	2	37	3	1	3	24	3	52	24
38	0	47	1	8	1	29	1	51	2	13	2	37	3	0	3	23	3	50	22
40	0	47	1	7	1	28	1	50	2	12	2	36	2	59	3	22	3	49	20
42	0	47	1	7	1	28	1	50	2	12	2	35	2	58	3	21	3	48	18
44	0	46	1	6	1	27	1	49	2	11	2	34	2	57	3	20	3	46	16
46	0	49	1	6	1	27	1	49	2	11	2	34	2	56	3	19	3	45	14
48	0	46	1	6	1	26	1	48	2	10	2	33	2	55	3	18	3	44	12
50	0	46	1	6	1	26	1	48	2	9	2	32	2	54	3	17	3	43	10
52	0	45	1	5	1	25	1	47	2	8	2	31	2	53	3	16	3	41	8
54	0	45	1	5	1	25	1	47	2	8	2	30	2	52	3	15	3	40	6
56	0	45	1	5	1	24	1	46	2	7	2	29	2	51	3	14	3	39	4
58	0	45	1	5	1	24	1	45	2	6	2	28	2	50	3	13	3	38	2
60	0	44	1	4	1	23	1	44	2	5	2	27	2	49	3	11	3	36	0

SVBTRAHE

Horæ 14. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.
Horæ 6. Aſcenſionis rectæ Medij Cœli pro Domo Tertia.

Horæ

ADDE

Poli	47		48		49		50		51		52		53		54		55		Poli
Horæ 6. Aſcenſionis rectæ medij Cęli pro Domo Vndecima. Horæ 22. Aſcenſionis rectæ medij Cęli pro Domo Tertia.																			
M	G.	M.	G.	M.	G.	M.	G	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	44	1	4	1	23	1	44	2	5	2	27	2	49	3	11	3	36	60
2	0	44	1	4	1	23	1	43	2	4	2	26	2	48	3	10	3	35	58
4	0	43	1	3	1	22	1	42	2	3	2	25	2	46	3	8	3	33	56
6	0	43	1	3	1	22	1	42	2	2	2	24	2	45	3	7	3	31	54
8	0	42	1	2	1	21	1	41	2	1	2	23	2	43	3	6	3	28	52
10	0	42	1	2	1	21	1	40	2	0	2	22	2	42	3	5	3	29	50
12	0	41	1	1	1	20	1	39	1	59	2	21	2	41	3	3	3	26	48
14	0	41	1	1	1	20	1	39	1	58	2	20	2	40	3	2	3	25	46
16	0	41	1	0	1	19	1	38	1	57	2	18	2	39	3	1	3	23	44
18	0	41	1	0	1	19	1	38	1	57	2	17	2	38	3	0	3	22	42
20	0	40	1	0	1	18	1	37	1	56	2	16	2	36	2	58	3	20	40
22	0	40	0	59	1	18	1	36	1	55	2	15	2	35	2	57	3	19	38
24	0	40	0	59	1	17	1	35	1	54	2	14	2	34	2	55	3	17	36
26	0	40	0	59	1	17	1	35	1	54	2	13	2	33	2	54	3	16	34
28	0	40	0	58	1	16	1	34	1	53	2	12	2	32	2	52	3	14	32
30	0	40	0	58	1	16	1	33	1	52	2	11	2	31	2	51	3	13	30
32	0	39	0	57	1	15	1	32	1	51	2	10	2	29	2	50	3	11	28
34	0	39	0	57	1	15	1	32	1	50	2	9	2	28	2	49	3	10	26
36	0	39	0	56	1	14	1	31	1	49	2	8	2	27	2	47	3	8	24
38	0	38	0	56	1	13	1	30	1	48	2	7	2	26	2	46	3	6	22
40	0	38	0	55	1	12	1	29	1	47	2	6	2	24	2	44	3	4	20
42	0	38	0	55	1	12	1	28	1	46	2	5	2	23	2	43	3	3	18
44	0	37	0	54	1	11	1	27	1	45	2	4	2	21	2	41	3	1	16
46	0	37	0	54	1	10	1	26	1	44	2	3	2	20	2	40	3	0	14
48	0	36	0	53	1	9	1	25	1	43	2	1	2	19	2	38	2	58	12
50	0	36	0	53	1	9	1	25	1	42	2	0	2	18	2	37	2	57	10
52	0	36	0	52	1	8	1	24	1	41	1	59	2	17	2	35	2	55	8
54	0	36	0	52	1	8	1	24	1	40	1	58	2	16	2	35	2	53	6
56	0	36	0	52	1	7	1	23	1	39	1	57	2	14	2	33	2	51	4
58	0	35	0	52	1	7	1	22	1	38	1	56	2	13	2	32	2	50	2
60	0	35	0	51	1	6	1	21	1	37	1	55	2	11	2	30	2	48	0

SVBTRAHE

Horæ 13. Aſcenſionis rectæ medij Cęli pro Domo Vndecima.
Horæ 5. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

	SVBTRAHE							ADDE		
Poli.	38	39	40	41	42	43	44	45	46	Poli
Horæ 7. Aſcenſionis rectæ medij Celi pro Domo Vndecima. Horæ 23. Aſcenſionis rectæ medij Celi pro Domo Tertia.										
M	G. M.	G. M.	G. M.	G. M.	G. M	G. M.	G. M.	G. M.	G. M.	M
0	1 23	1 10	0 59	0 46	0 33	0 21	0 8	0 7	0 21	60
2	1 22	1 10	0 59	0 46	0 33	0 21	0 8	0 7	0 21	58
4	1 20	1 9	0 58	0 46	0 33	0 21	0 8	0 7	0 20	56
6	1 21	1 9	0 58	0 45	0 33	0 20	0 8	0 7	0 20	54
8	1 19	1 8	0 57	0 45	0 32	0 20	0 8	0 7	0 20	52
10	1 19	1 7	0 57	0 45	0 32	0 19	0 8	0 7	0 20	50
12	1 18	1 6	0 56	0 44	0 32	0 19	0 7	0 6	0 19	48
14	1 17	1 5	0 55	0 44	0 32	0 19	0 7	0 6	0 19	46
16	1 16	1 4	0 54	0 43	0 31	0 18	0 7	0 6	0 19	44
18	1 15	1 4	0 54	0 43	0 31	0 18	0 7	0 6	0 19	42
20	1 14	1 3	0 53	0 42	0 30	0 18	0 7	0 6	0 19	40
22	1 14	1 3	0 53	0 42	0 30	0 18	0 7	0 6	0 18	38
24	1 13	1 2	0 52	0 41	0 30	0 17	0 7	0 6	0 18	36
26	1 13	1 2	0 52	0 41	0 30	0 17	0 7	0 6	0 18	34
28	1 12	1 1	0 51	0 40	0 29	0 17	0 7	0 6	0 18	32
30	1 11	1 1	0 51	0 4	0 29	0 17	0 7	0 6	0 18	30
32	1 10	1 0	0 50	0 39	0 29	0 17	0 7	0 6	0 17	28
34	1 9	1 0	0 50	0 39	0 29	0 17	0 7	0 6	0 17	26
36	1 8	0 59	0 49	0 38	0 28	0 17	0 7	0 6	0 17	24
38	1 7	0 58	0 49	0 38	0 28	0 16	0 7	0 6	0 17	22
40	1 6	0 57	0 48	0 37	0 27	0 16	0 7	0 5	0 17	20
42	1 6	0 57	0 48	0 37	0 27	0 16	0 6	0 5	0 17	18
44	1 5	0 56	0 47	0 36	0 26	0 16	0 6	0 5	0 16	16
46	1 4	0 56	0 47	0 36	0 26	0 16	0 6	0 5	0 16	14
48	1 3	0 55	0 46	0 35	0 25	0 16	0 6	0 5	0 16	12
50	1 2	0 54	0 45	0 35	0 25	0 15	0 6	0 5	0 16	10
52	1 1	0 53	0 44	0 34	0 24	0 15	0 6	0 5	0 16	8
54	1 0	0 52	0 44	0 34	0 24	0 15	0 6	0 5	0 15	6
56	0 59	0 51	0 43	0 33	0 23	0 15	0 6	0 5	0 15	4
58	0 58	0 50	0 42	0 33	0 23	0 15	0 6	0 5	0 15	2
60	0 57	0 49	0 41	0 32	0 23	0 14	0 5	0 5	0 15	0
	ADDE.							SVBTRAHE		

Horæ 12. Aſcenſionis rectæ medij Celi pro Domo Vndecima.
Horæ 4. Aſcenſionis rectæ medij Celi pro Domo Tertia.

Ho-

A D D E

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 7 Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.										
Horæ 23. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 35	0 51	1 6	1 21	1 37	1 55	2 11	2 30	2 48	60
2	0 35	0 51	1 5	1 20	1 36	1 54	2 10	2 29	2 46	58
4	0 34	0 50	1 4	1 19	1 35	1 52	2 9	2 27	2 44	56
6	0 34	0 50	1 4	1 19	1 34	1 51	2 8	2 26	2 43	54
8	0 34	0 49	1 3	1 18	1 33	1 50	2 6	2 24	2 41	52
10	0 34	0 49	1 3	1 18	1 32	1 49	2 5	2 23	2 40	50
12	0 33	0 48	1 2	1 17	1 31	1 48	2 3	2 21	2 38	48
14	0 33	0 48	1 2	1 16	1 30	1 47	2 2	2 20	2 36	46
16	0 32	0 47	1 1	1 15	1 29	1 45	2 1	2 18	2 34	44
18	0 32	0 47	1 1	1 15	1 28	1 44	2 0	2 17	2 33	42
20	0 32	0 46	1 0	1 14	1 27	1 43	1 58	2 15	2 31	40
22	0 31	0 46	1 0	1 13	1 26	1 42	1 57	2 14	2 30	38
24	0 31	0 45	0 59	1 12	1 25	1 40	1 55	2 12	2 28	36
26	0 30	0 45	0 58	1 11	1 24	1 39	1 54	2 10	2 26	34
28	0 30	0 44	0 57	1 10	1 23	1 38	1 52	2 8	2 24	32
30	0 30	0 43	0 56	1 9	1 22	1 37	1 51	2 7	2 23	30
32	0 29	0 42	0 55	1 8	1 21	1 35	1 49	2 5	2 21	28
34	0 29	0 42	0 55	1 8	1 20	1 34	1 48	2 4	2 19	26
36	0 29	0 41	0 54	1 7	1 19	1 33	1 47	2 2	2 17	24
38	0 29	0 41	0 54	1 6	1 18	1 32	1 46	2 1	2 16	22
40	0 28	0 40	0 53	1 5	1 17	1 31	1 44	1 59	2 14	20
42	0 28	0 40	0 52	1 4	1 16	1 30	1 43	1 58	2 12	18
44	0 28	0 39	0 51	1 3	1 15	1 28	1 42	1 56	2 10	16
46	0 28	0 39	0 51	1 2	1 14	1 27	1 41	1 55	2 9	14
48	0 27	0 38	0 50	1 1	1 13	1 26	1 39	1 53	2 7	12
5	0 27	0 38	0 50	1 1	1 12	1 25	1 38	1 52	2 5	10
52	0 27	0 37	0 49	1 0	1 11	1 24	1 36	1 50	2 3	8
54	0 26	0 27	0 48	0 59	1 10	1 23	1 35	1 49	2 2	6
56	0 26	0 36	0 47	0 58	1 9	1 21	1 34	1 47	2 0	4
58	0 25	0 36	0 46	0 57	1 8	1 20	1 33	1 46	1 58	2
60	0 25	0 35	0 45	0 56	1 7	1 19	1 31	1 44	1 56	0

S V B T R A H E

Horæ 12. Aſcenſionis rectæ Medij Cęli pro Domo Vndecima.
Horæ 4. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 8. Aſcenſionis rectæ medij Cœli pro Domo Vndecima. Horæ 0. Aſcenſionis rectæ medij Cęli pro Domo Tertia.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 57	0 49	0 41	0 32	0 23	0 14	0 5	0 5	0 15	60
2	0 57	0 49	0 41	0 32	0 23	0 14	0 5	0 5	0 15	58
4	0 56	0 48	0 40	0 31	0 22	0 14	0 5	0 5	0 14	56
6	0 55	0 47	0 39	0 31	0 22	0 14	0 5	0 5	0 14	54
8	0 54	0 46	0 38	0 30	0 21	0 13	0 5	0 5	0 14	52
10	0 53	0 46	0 38	0 30	0 21	0 13	0 5	0 5	0 14	50
12	0 52	0 45	0 37	0 29	0 21	0 13	0 5	0 5	0 13	48
14	0 51	0 44	0 36	0 29	0 20	0 13	0 5	0 5	0 13	46
16	0 50	0 43	0 36	0 28	0 20	0 12	0 4	0 5	0 13	44
18	0 49	0 43	0 35	0 28	0 19	0 12	0 4	0 4	0 13	42
20	0 48	0 42	0 34	0 27	0 19	0 12	0 4	0 4	0 12	40
22	0 47	0 41	0 34	0 27	0 18	0 12	0 4	0 4	0 12	38
24	0 46	0 40	0 33	0 26	0 18	0 11	0 4	0 4	0 12	36
26	0 45	0 39	0 33	0 26	0 18	0 11	0 4	0 4	0 12	34
28	0 44	0 38	0 32	0 25	0 18	0 11	0 4	0 4	0 12	32
30	0 44	0 38	0 32	0 25	0 17	0 11	0 4	0 4	0 11	30
32	0 43	0 37	0 31	0 24	0 17	0 10	0 4	0 4	0 11	28
34	0 42	0 37	0 31	0 24	0 17	0 10	0 4	0 4	0 11	26
36	0 41	0 36	0 30	0 23	0 17	0 10	0 4	0 4	0 11	24
38	0 40	0 35	0 30	0 23	0 16	0 10	0 4	0 4	0 11	22
40	0 39	0 34	0 29	0 22	0 16	0 9	0 4	0 4	0 10	20
42	0 38	0 33	0 28	0 22	0 15	0 9	0 4	0 4	0 10	18
44	0 37	0 32	0 27	0 21	0 15	0 9	0 3	0 4	0 10	16
46	0 36	0 32	0 27	0 21	0 15	0 9	0 3	0 4	0 10	14
48	0 35	0 31	0 26	0 20	0 14	0 8	0 3	0 4	0 9	12
50	0 35	0 30	0 26	0 20	0 14	0 8	0 3	0 3	0 9	10
52	0 34	0 29	0 25	0 19	0 13	0 8	0 3	0 3	0 9	8
54	0 33	0 29	0 25	0 19	0 13	0 8	0 3	0 3	0 9	6
56	0 32	0 28	0 24	0 18	0 13	0 8	0 3	0 3	0 8	4
58	0 31	0 27	0 23	0 18	0 12	0 8	0 3	0 3	0 8	2
60	0 30	0 26	0 22	0 17	0 12	0 7	0 3	0 3	0 8	0
	ADDE							SVBTRAHE		

Horæ 11. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 3. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Horæ

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 8. Aſcenſionis rectæ medij Cœli pro Domo Vndecima. Horæ 0. Aſcenſionis rectæ medij Cœli pro Domo Tertia.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 25	0 35	0 45	0 56	1 7	1 19	1 31	1 44	1 56	60
2	0 25	0 35	0 45	0 55	1 6	1 18	1 30	1 42	1 54	58
4	0 24	0 34	0 44	0 54	1 5	1 17	1 28	1 40	1 53	56
6	0 24	0 34	0 44	0 54	1 4	1 16	1 27	1 39	1 51	54
8	0 23	0 33	0 43	0 53	1 3	1 15	1 25	1 37	1 49	52
10	0 23	0 33	0 43	0 52	1 2	1 14	1 24	1 36	1 47	50
12	0 22	0 32	0 42	0 51	1 1	1 12	1 23	1 34	1 45	48
14	0 22	0 32	0 41	0 50	1 0	1 11	1 21	1 32	1 44	46
16	0 21	0 31	0 40	0 49	0 59	1 10	1 20	1 30	1 42	44
18	0 21	0 31	0 40	0 49	0 58	1 9	1 18	1 29	1 40	42
20	0 21	0 30	0 39	0 48	0 57	1 8	1 17	1 27	1 38	40
22	0 21	0 30	0 39	0 47	0 56	1 7	1 16	1 26	1 36	38
24	0 20	0 29	0 38	0 46	0 55	1 5	1 14	1 24	1 34	36
26	0 20	0 29	0 37	0 46	0 54	1 4	1 13	1 22	1 32	34
28	0 20	0 28	0 36	0 45	0 53	1 2	1 11	1 20	1 30	32
30	0 19	0 27	0 35	0 44	0 52	1 1	1 10	1 19	1 28	30
32	0 19	0 26	0 34	0 43	0 51	0 59	1 8	1 17	1 26	28
34	0 18	0 26	0 33	0 42	0 50	0 58	1 7	1 15	1 25	26
36	0 18	0 25	0 32	0 41	0 48	0 57	1 5	1 13	1 23	24
38	0 17	0 25	0 32	0 40	0 47	0 56	1 4	1 12	1 21	22
40	0 17	0 24	0 31	0 39	0 46	0 54	1 2	1 10	1 19	20
42	0 16	0 24	0 31	0 38	0 45	0 53	1 1	1 8	1 17	18
44	0 16	0 23	0 30	0 37	0 44	0 52	1 59	1 6	1 15	16
46	0 15	0 22	0 29	0 36	0 43	0 50	1 58	1 5	1 13	14
48	0 15	0 21	0 28	0 35	0 42	0 49	1 56	1 3	1 11	12
50	0 14	0 21	0 28	0 34	0 41	0 48	1 55	1 1	1 9	10
52	0 14	0 20	0 27	0 33	0 39	0 47	1 53	0 59	1 7	8
54	0 14	0 20	0 26	0 32	0 38	0 45	1 52	0 58	1 5	6
56	0 13	0 19	0 25	0 31	0 37	0 44	1 50	0 56	1 3	4
58	0 13	0 19	0 25	0 30	0 36	0 43	1 49	0 54	1 1	2
60	0 13	0 18	0 24	0 39	0 35	0 41	1 47	0 52	0 59	0

SVBTRAHE

Horæ 11. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.
Horæ 3. Aſcenſionis rectæ Medij Cœli pro Domo Tertia.

Horæ

			SVBTRAHE					ADDE	
Poli	38	39	40	41	42	43	44	45	46	Poli

Horæ 9. Aſcenſionis rectæ medij Cęli pro Domo Vndecima.
Horæ 1. Aſcenſionis rectæ medij Cęli pro Domo Tertia.

M	G. M.	G. M.	G. M	G. M.	G. M.	G. M.	G. M.	G. M,	G. M.	M
0	0 30	0 26	0 22	0 17	0 12	0 7	0 3	0 3	0 8	60
2	0 29	0 25	0 21	0 16	0 12	0 7	0 3	0 3	0 8	58
4	0 28	0 24	0 21	0 16	0 11	0 7	0 3	0 3	0 8	56
6	0 27	0 23	0 20	0 15	0 11	0 7	0 3	0 3	0 8	54
8	0 26	0 23	0 19	0 15	0 11	0 7	0 3	0 3	0 7	52
10	0 25	0 21	0 18	0 14	0 10	0 6	0 2	0 2	0 7	50
12	0 23	0 21	0 17	0 14	0 10	0 6	0 2	0 2	0 7	48
14	0 23	0 20	0 16	0 13	0 9	0 6	0 2	0 2	0 7	46
16	0 22	0 19	0 16	0 13	0 9	0 6	0 2	0 2	0 6	44
18	0 21	0 18	0 15	0 12	0 9	0 5	0 2	0 2	0 6	42
20	0 20	0 18	0 15	0 12	0 8	0 5	0 2	0 2	0 6	40
22	0 19	0 17	0 14	0 11	0 8	0 5	0 2	0 2	0 6	38
24	0 18	0 16	0 14	0 11	0 8	0 5	0 2	0 2	0 5	36
26	0 17	0 15	0 13	0 10	0 7	0 4	0 2	0 2	0 5	34
28	0 16	0 14	0 12	0 10	0 7	0 4	0 2	0 2	0 4	32
30	0 15	0 13	0 11	0 9	0 6	0 4	0 2	0 2	0 4	30
32	0 14	0 12	0 10	0 9	0 6	0 4	0 2	0 2	0 4	28
34	0 13	0 11	0 9	0 8	0 6	0 3	0 2	0 1	0 4	26
36	0 12	0 11	0 8	0 8	0 5	0 3	0 1	0 1	0 3	24
38	0 11	0 10	0 7	0 7	0 5	0 3	0 1	0 1	0 3	22
40	0 10	0 9	0 7	0 7	0 5	0 3	0 1	0 1	0 3	20
42	0 9	0 8	0 6	0 6	0 4	0 3	0 1	0 1	0 3	18
44	0 8	0 7	0 6	0 6	0 4	0 2	0 1	0 1	0 2	16
46	0 7	0 6	0 5	0 5	0 4	0 2	0 1	0 1	0 2	14
48	0 6	0 6	0 5	0 5	0 4	0 2	0 1	0 1	0 1	12
50	0 5	0 5	0 4	0 4	0 3	0 2	0 1	0 1	0 1	10
52	0 4	0 4	0 4	0 4	0 3	0 2	0 1	0 1	0 1	8
54	0 3	0 3	0 3	0 3	0 2	0 1	0 1	0 1	0 1	6
56	0 2	0 2	0 2	0 2	0 1	0 1	0 1	0 0	0 0	4
58	0 1	0 1	0 1	0 1	0 1	0 1	0 0	0 0	0 0	2
60	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0

ADDE	SVBTRAHE

Horæ 10. Aſcenſionis rectæ medij Cœli pro Domo Vndecima.
Horæ 2. Aſcenſionis rectæ medij Cœli pro Domo Tertia.

Ho-

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli

Horæ 9. Aſcenſionis rectæ Medij Cœli pro Domo Vndecima.
Horæ 1. Aſcenſionis rectæ Medij Cęli pro Domo Tertia.

M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 13	0 18	0 24	0 29	0 35	0 41	0 47	0 52	0 59	60
2	0 12	0 17	0 23	0 28	0 34	0 40	0 46	0 51	0 57	58
4	0 12	0 [illegible]	0 22	0 27	0 32	0 39	0 44	0 49	0 55	56
6	0 12	0 16	0 21	0 27	0 31	0 38	0 43	0 47	0 51	54
8	0 11	0 15	0 20	0 26	0 30	0 36	0 41	0 45	0 51	52
10	0 11	0 15	0 20	0 25	0 29	0 35	0 40	0 44	0 50	50
12	0 11	0 14	0 19	0 24	0 28	0 34	0 38	0 42	0 48	48
14	0 10	0 14	0 18	0 23	0 27	0 32	0 37	0 40	0 46	46
16	0 10	0 13	0 17	0 22	0 26	0 31	0 35	0 38	0 44	44
18	0 10	0 12	0 17	0 21	0 25	0 30	0 34	0 37	0 42	42
20	0 9	0 11	0 16	0 20	0 23	0 29	0 32	0 35	0 40	40
22	0 9	0 11	0 15	0 19	0 2[illegible]	0 28	0 31	0 33	0 38	38
24	0 8	0 10	0 14	0 18	0 21	0 26	0 29	0 31	0 36	36
26	0 8	0 10	0 14	0 17	0 20	0 25	0 28	0 30	0 34	34
28	0 8	0 9	0 13	0 16	0 19	0 23	0 26	0 28	0 32	32
30	0 7	0 9	0 13	0 15	0 18	0 22	0 25	0 26	0 30	30
32	0 7	0 8	0 12	0 14	0 17	0 20	0 23	0 24	0 28	28
34	0 7	0 8	0 11	0 13	0 16	0 18	0 22	0 23	0 26	26
36	0 6	0 7	0 10	0 12	0 15	0 18	0 20	0 21	0 24	24
38	0 6	0 7	0 9	0 11	0 14	0 16	0 18	0 19	0 22	22
40	0 5	0 6	0 8	0 10	0 12	0 15	0 16	0 17	0 20	20
42	0 4	0 5	0 7	0 9	0 11	0 14	0 15	0 16	0 18	18
44	0 3	0 4	0 6	0 8	0 9	0 12	0 13	0 14	0 16	16
46	0 2	0 3	0 6	0 7	0 8	0 11	0 12	0 12	0 14	14
48	0 2	0 3	0 5	0 6	0 7	0 9	0 10	0 10	0 12	12
50	0 1	0 3	0 4	0 5	0 6	0 8	0 9	0 9	0 10	10
52	0 1	0 2	0 3	0 4	0 5	0 6	0 7	0 7	0 8	8
54	0 0	0 2	0 2	0 3	0 4	0 5	0 6	0 6	0 6	6
56	0 0	0 1	0 1	0 2	0 3	0 3	0 4	0 4	0 4	4
58	0 0	0 1	0 1	0 1	0 1	0 2	0 2	0 2	0 2	2
60	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0

SVBTRAHE

Horæ 10. Aſcenſionis rectæ Medij Celi pro Domo Vndecima.
Horæ 2. Aſcenſionis recta Medij Celi pro Domo Tertia.

Ho-



TABV-

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TABVLAE

ÆQVATIONVM DOMVS DVODECIMÆ, ET SECVNDÆ,

Vbi Cęleſtis Figura erigenda eſt ad Altitudinem Poli gr. 38. ſiuè 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55.

	S V B T R A H E														A D D E				
Poli	38		39		40		41		42		43		44		45		46		Poli
Horæ 20. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima. Horæ 16. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
2	0	6	0	5	0	4	0	3	0	2	0	2	0	1	0	1	0	2	58
4	0	11	0	9	0	8	0	6	0	4	0	3	0	1	0	1	0	4	56
6	0	17	0	14	0	12	0	9	0	7	0	5	0	2	0	2	0	6	54
8	0	23	0	19	0	16	0	12	0	9	0	6	0	2	0	2	0	8	52
10	0	29	0	24	0	21	0	15	0	12	0	8	0	3	0	3	0	10	50
12	0	34	0	29	0	25	0	18	0	14	0	9	0	3	0	3	0	12	48
14	0	40	0	33	0	29	0	22	0	16	0	11	0	4	0	4	0	13	46
16	0	45	0	38	0	33	0	25	0	18	0	12	0	4	0	4	0	14	44
18	0	51	0	43	0	37	0	29	0	21	0	14	0	5	0	5	0	16	42
20	0	56	0	48	0	41	0	32	0	23	1	15	0	5	0	5	0	17	40
22	1	2	0	53	0	45	0	35	0	26	1	17	0	6	0	6	0	19	38
24	1	7	0	58	0	49	0	38	0	28	0	18	0	6	0	6	0	21	36
26	1	13	1	3	0	53	0	41	0	31	0	20	0	7	0	7	0	22	34
28	1	18	1	7	0	57	0	44	0	33	0	21	0	7	0	7	0	24	32
30	1	24	1	12	1	1	0	48	0	35	0	23	0	7	0	8	0	25	30
32	1	29	1	16	1	5	0	51	0	37	0	24	0	8	0	8	0	27	28
34	1	34	1	21	1	9	0	54	0	40	0	26	0	8	0	9	0	28	26
36	1	39	1	25	1	12	0	57	0	42	0	27	0	8	0	9	0	30	24
38	1	45	1	30	1	16	1	0	0	45	0	29	0	9	0	10	0	31	22
40	1	50	1	34	1	19	1	2	0	47	0	30	0	9	0	11	0	33	20
42	1	55	1	38	1	23	1	5	0	49	0	31	0	9	0	12	0	34	18
44	2	0	1	42	1	26	1	8	0	51	0	32	0	10	0	12	0	36	16
46	2	5	1	4	1	30	1	11	0	53	0	33	0	10	0	13	0	37	14
48	2	10	1	50	1	33	1	14	0	55	0	34	0	10	0	14	0	39	12
50	2	15	1	54	1	37	1	16	0	57	0	35	0	11	0	14	0	40	10
52	2	19	1	58	1	40	1	19	0	58	0	36	0	11	0	15	0	41	8
54	2	23	2	2	1	43	1	21	1	1	0	37	0	11	0	15	0	43	6
56	2	27	2	5	1	46	1	24	1	1	0	38	0	11	0	16	0	44	4
58	2	32	2	9	1	49	1	26	1	3	0	39	0	12	0	16	0	45	2
60	2	36	2	12	1	52	1	29	1	4	0	40	0	12	0	17	0	46	0
	A D D E														SVBTRAHE				
Horæ 19. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima. Horæ 15. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.																			

Ho-

ADDE

Poli	47		48		49		50		51		52		53		54		55		Poli
Horæ 20. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima. Horæ 16. Aſcenſionis rectæ Medij Cęli pro Domò Secunda.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
2	0	3	0	5	0	6	0	8	0	10	0	12	0	14	0	17	0	20	58
4	0	6	0	9	0	12	0	16	0	19	0	23	0	28	0	33	0	39	56
6	0	9	0	13	0	18	0	24	0	29	0	55	0	42	0	49	0	59	54
8	0	12	0	17	0	24	0	32	0	38	0	46	0	55	1	5	1	18	52
10	0	15	0	21	0	30	0	40	0	47	0	58	1	9	1	21	1	37	50
12	0	18	0	25	0	35	0	47	0	56	1	9	1	22	1	36	1	55	48
14	0	21	0	30	0	41	0	55	1	5	1	20	1	36	1	52	2	13	46
16	0	24	0	34	0	46	1	2	1	14	1	31	1	49	2	7	2	31	44
18	0	27	0	38	0	52	1	9	1	23	1	42	2	2	2	23	2	49	42
20	0	30	0	42	0	57	1	16	1	32	1	52	2	15	2	38	3	7	40
22	0	33	0	46	1	3	1	23	1	41	2	3	2	28	2	53	3	25	38
24	0	36	0	50	1	8	1	30	1	49	2	13	2	41	3	8	3	43	36
26	0	39	0	54	1	14	1	37	1	58	2	24	2	54	3	23	4	1	34
28	0	42	0	58	1	19	1	43	2	7	2	34	3	6	3	37	4	18	32
30	0	45	1	2	1	24	1	50	2	15	2	44	3	18	3	51	4	35	30
32	0	47	1	6	1	29	1	57	2	24	2	54	3	30	4	5	4	51	28
34	0	50	1	10	1	35	2	3	2	32	3	4	3	41	4	19	5	7	26
36	0	52	1	14	1	40	2	10	2	40	3	14	3	53	4	32	5	22	24
38	0	55	1	18	1	45	2	16	2	48	3	24	4	4	4	45	5	37	22
40	0	57	1	21	1	50	2	23	2	56	3	33	4	15	4	58	5	52	20
42	1	0	1	25	1	55	2	29	3	3	3	43	4	26	5	11	6	7	18
44	1	2	1	28	2	0	2	35	3	11	3	52	4	36	5	24	6	21	16
46	1	5	1	32	2	5	2	41	3	18	4	1	4	46	5	37	6	35	14
48	1	7	1	35	2	9	2	46	3	25	4	10	4	56	5	49	6	49	12
50	1	10	1	39	2	14	2	52	3	32	4	19	5	6	6	1	7	3	10
52	1	12	1	42	2	17	2	57	3	39	4	27	5	16	6	13	7	16	8
54	1	14	1	46	2	23	3	3	3	46	4	35	5	26	6	25	7	29	6
56	1	16	1	49	2	27	3	8	3	52	4	43	5	35	6	36	8	42	4
58	1	19	1	53	2	32	3	14	3	59	4	51	5	44	6	47	8	55	2
60	1	21	1	56	2	36	3	19	4	5	4	58	5	53	6	58	8	7	0

SVBTRAHE

Horæ 19. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima.
Horæ 15. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

SVBTRAHE															ADDE				
Poli	38		39		40		41		42		43		44		45		46		Poli
Horæ 21. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima. Horæ 17. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	36	2	12	1	52	1	29	1	4	0	40	0	12	0	17	0	46	60
2	2	40	2	15	1	55	1	31	1	6	0	41	0	12	0	18	0	48	58
4	2	44	2	18	1	57	1	33	1	8	0	41	0	12	0	18	0	49	56
6	2	48	2	22	2	0	1	36	1	10	0	42	0	13	0	18	0	50	54
8	2	52	2	25	2	3	1	38	1	11	0	43	0	13	0	19	0	51	52
10	2	56	2	29	2	6	1	40	1	13	0	44	0	14	0	19	0	53	50
12	3	0	2	32	2	9	1	42	1	15	0	44	0	14	0	19	0	54	48
14	3	4	2	36	2	12	1	45	1	17	0	45	0	15	0	20	0	55	46
16	3	8	2	39	2	14	1	47	1	18	0	46	0	15	0	20	0	56	44
18	3	12	2	42	2	16	1	49	1	19	0	47	0	16	0	20	0	57	42
20	3	15	2	45	2	18	1	51	1	20	0	48	0	16	0	21	0	58	40
22	3	19	2	48	2	21	1	53	1	22	0	49	0	16	0	21	0	59	38
24	3	22	2	51	2	23	1	55	1	23	0	50	0	17	0	21	1	0	36
26	3	26	2	54	2	26	1	57	1	24	0	51	0	17	0	22	1	1	34
28	3	29	2	56	2	28	1	58	1	25	0	52	0	17	0	22	1	2	32
30	3	32	2	59	2	30	2	0	1	27	0	53	0	17	0	22	1	3	30
32	3	35	3	2	2	32	2	1	1	28	0	54	0	18	0	22	1	4	28
34	3	38	3	4	2	34	2	3	1	30	0	55	0	18	0	23	1	5	26
36	3	41	3	6	2	36	2	4	1	31	0	55	0	18	0	23	1	6	24
38	3	44	3	8	2	38	2	6	1	32	0	56	0	18	0	23	1	7	22
40	3	46	3	10	2	40	2	7	1	33	0	56	0	18	0	23	1	7	20
42	3	49	3	13	2	42	2	8	1	34	0	57	0	18	0	24	1	8	18
4	3	51	3	15	2	43	2	9	1	35	0	57	0	18	0	24	1	8	16
46	3	54	3	17	2	45	2	10	1	36	0	58	0	18	0	24	1	9	14
48	3	56	3	19	2	46	2	11	1	37	0	58	0	19	0	24	1	10	12
50	3	58	3	21	2	48	2	12	1	38	0	59	0	19	0	25	1	10	10
52	4	0	3	23	2	49	2	13	1	38	0	59	0	19	0	25	1	11	8
54	4	2	3	25	2	50	2	14	1	39	0	59	0	19	0	25	1	12	6
56	4	4	3	27	2	51	2	15	1	39	0	59	0	19	0	26	1	12	4
58	4	6	3	29	2	53	2	16	1	40	1	0	0	19	0	26	1	13	2
60	4	7	3	30	2	54	2	17	1	40	1	0	0	19	0	26	1	13	6
ADDE															SVBTRAHE				
Horæ 18. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima. Horæ 14. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.																			

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ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 21. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.										
Horæ 17. Aſcenſionis rectæ medij Cœli pro Domo Secunda.										
M	G M.	G. M.	M. G.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	1 21	1 56	2 36	3 19	4 5	4 58	5 52	6 58	8 7	60
2	1 24	1 59	2 40	3 24	4 12	5 5	6 2	7 9	8 19	58
4	1 26	2 2	2 44	3 29	4 18	5 12	6 10	7 19	8 30	56
6	1 28	2 5	2 48	3 34	4 24	5 19	6 18	7 29	8 41	54
8	1 30	2 8	2 52	3 39	4 30	5 25	6 26	7 38	8 51	52
10	1 32	2 11	2 56	3 44	4 36	5 32	6 34	7 47	9 1	50
12	1 34	2 14	2 59	3 48	4 41	5 38	6 41	7 55	9 10	48
14	1 36	2 17	3 2	3 53	4 46	5 44	6 48	8 3	9 19	46
16	1 38	2 19	3 5	3 57	4 51	5 50	6 55	8 10	9 27	44
18	1 40	2 22	3 9	4 1	4 56	5 56	7 2	8 17	9 35	42
20	1 42	2 24	3 12	4 5	5 0	6 1	7 8	8 24	9 43	40
22	1 43	2 26	3 15	4 9	5 5	6 7	7 14	8 31	9 50	38
24	1 44	2 28	3 18	4 12	5 9	6 12	7 20	8 37	9 57	36
26	1 46	2 30	3 21	4 15	5 13	6 17	7 26	8 43	10 4	34
28	1 47	2 32	3 23	4 18	5 17	6 22	7 31	8 49	10 10	32
30	1 48	2 34	3 26	4 21	5 21	6 27	7 36	8 55	10 16	30
32	1 49	2 35	3 28	4 24	5 24	6 31	7 41	9 0	10 22	28
34	1 50	2 37	3 30	4 27	5 28	6 35	7 46	9 5	10 28	26
36	1 51	2 39	3 32	4 30	5 31	6 39	7 50	9 10	10 34	24
38	1 52	2 41	3 34	4 31	5 34	6 43	7 54	9 15	10 39	22
40	1 53	2 42	3 36	4 35	5 37	6 46	7 58	9 19	10 44	20
42	1 54	2 44	3 38	4 38	5 40	6 49	8 2	9 24	10 48	18
44	1 55	2 45	3 40	4 40	5 43	6 52	8 5	9 28	10 52	16
46	1 56	2 47	3 42	4 42	5 46	6 55	8 9	9 32	10 56	14
48	1 57	2 48	3 43	4 44	5 48	6 58	8 12	9 36	11 0	12
50	1 58	2 50	3 45	4 46	5 51	7 1	8 15	9 39	11 4	10
52	1 59	2 52	3 47	4 48	5 53	7 4	8 18	9 42	11 8	8
54	2 0	2 53	3 49	4 50	5 56	7 7	8 21	9 45	11 12	4
56	2 1	2 54	3 51	4 52	5 58	7 9	8 24	9 48	11 15	2
58	2 2	2 56	3 53	4 54	6 1	7 12	8 27	9 51	11 18	1
60	2 3	2 57	3 54	4 56	6 1	7 14	8 30	9 53	11 21	0

SVBTRAHE

Horæ 18. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 14. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.

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SVBTRAHE | ADDE

Horæ 22. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 18. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Poli	38		39		40		41		42		43		44		45		46		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	4	7	3	30	2	54	2	17	1	40	1	0	0	19	0	26	1	13	60
2	4	9	3	32	2	55	2	18	1	41	1	1	0	19	0	26	1	13	58
4	4	11	3	33	2	56	2	19	1	42	1	1	0	19	0	26	1	14	56
6	4	13	3	35	2	58	2	20	1	43	1	2	0	19	0	26	1	14	54
8	4	14	3	36	2	59	2	21	1	43	1	2	0	19	0	26	1	14	52
10	4	16	3	38	3	0	2	22	1	44	1	3	0	19	0	26	1	15	50
12	4	17	3	39	3	1	2	23	1	44	1	3	0	19	0	27	2	15	48
14	4	19	3	40	3	3	2	24	1	45	1	3	0	19	0	27	1	16	46
16	4	20	3	41	3	4	2	24	1	45	1	4	0	19	0	27	1	16	44
18	4	22	3	42	3	5	2	25	1	46	1	4	0	19	0	27	1	17	42
20	4	23	3	43	3	6	2	25	1	46	1	4	0	19	0	27	1	17	40
22	4	24	3	44	3	7	2	26	1	47	1	5	0	19	0	27	1	17	38
24	4	25	3	45	3	8	2	26	1	47	1	5	0	19	0	27	1	18	36
26	4	27	3	46	3	9	2	27	1	48	1	5	0	19	0	27	1	18	34
28	4	28	3	47	3	9	2	27	1	48	1	5	0	19	0	27	1	18	32
30	4	29	3	48	3	10	2	28	1	48	1	5	0	19	0	27	1	18	30
32	4	30	3	48	3	10	2	28	1	49	1	5	0	19	0	27	1	18	28
34	4	31	3	49	3	11	2	29	1	49	1	6	0	19	0	27	1	18	26
36	4	31	3	49	3	11	2	29	1	49	1	6	0	19	0	28	2	19	24
38	4	32	3	50	3	12	2	30	1	49	1	6	0	20	0	28	1	19	22
40	4	33	3	50	3	12	2	30	1	50	1	6	0	20	0	28	1	19	20
42	4	34	3	51	3	13	2	31	1	50	1	6	0	20	0	28	1	19	18
44	4	34	3	51	3	13	2	31	1	50	1	7	0	20	0	28	1	19	16
46	4	35	3	52	3	13	2	32	1	50	1	7	0	20	0	28	1	19	14
48	4	35	3	52	3	13	2	32	1	50	1	7	0	20	0	28	1	19	12
50	4	36	3	53	3	14	2	33	1	50	1	7	0	20	0	28	1	19	10
52	4	36	3	53	3	14	2	33	1	51	1	7	0	20	0	28	1	19	8
54	4	37	3	53	3	14	2	33	1	51	1	7	0	20	0	28	1	19	6
56	4	37	3	54	3	14	2	34	1	51	1	8	0	20	0	28	1	19	4
58	4	38	3	54	3	14	2	34	1	51	1	8	0	20	0	28	1	19	2
60	4	38	3	54	3	15	2	34	1	51	1	8	0	20	0	28	1	19	0

ADDE | SVBTRAHE

Horæ 17. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 13. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Ho-

A D D E

Horæ 22. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 18. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	3	2	57	3	54	4	56	6	3	7	14	8	30	9	53	11	22	60
2	2	4	2	58	3	56	4	58	6	5	7	16	8	33	9	55	11	23	58
4	2	4	2	59	3	57	5	0	6	7	7	18	8	35	9	57	11	25	56
6	2	5	3	0	3	58	5	2	6	9	7	20	8	37	9	59	11	26	54
8	2	5	3	1	3	59	5	3	6	10	7	21	8	39	10	0	11	27	52
10	2	6	3	2	4	0	5	5	6	11	7	22	8	41	10	1	11	28	50
12	2	7	3	3	4	1	5	6	6	12	7	23	8	42	10	2	11	29	48
14	2	8	3	4	4	2	5	7	6	13	7	24	8	43	10	3	11	30	46
16	2	8	3	4	4	2	5	8	6	14	7	24	8	44	10	4	11	31	44
18	2	9	3	5	4	3	5	9	6	15	7	25	8	44	10	5	11	32	42
20	2	9	3	5	4	3	5	9	6	15	7	26	8	45	10	5	11	32	40
22	2	9	3	6	4	4	5	10	6	16	7	27	8	45	10	5	11	33	38
24	2	10	3	6	4	4	5	10	6	16	7	27	8	45	10	6	11	33	36
26	2	10	3	6	4	5	5	11	6	17	7	28	8	46	10	6	11	34	34
28	2	10	3	7	4	5	5	11	6	17	7	28	8	46	10	6	11	34	32
30	2	10	3	7	4	5	5	12	6	18	7	28	8	46	10	6	11	34	30
32	2	11	3	7	4	6	5	12	6	18	7	28	8	46	10	6	11	33	28
34	2	11	3	7	4	6	5	13	6	18	7	29	8	46	10	6	11	23	26
36	2	11	3	8	4	6	5	13	6	19	7	29	8	45	10	6	11	32	24
38	2	11	3	8	4	6	5	13	6	19	7	29	8	45	10	6	11	32	22
40	2	11	3	8	4	7	5	13	6	19	7	29	8	45	10	6	11	31	20
42	2	11	3	8	4	7	5	13	6	19	7	29	8	44	10	5	11	31	18
44	2	11	3	8	4	7	5	12	6	19	7	29	8	44	10	5	11	30	16
46	2	11	3	8	4	7	5	12	6	19	7	28	8	43	10	4	11	29	14
48	2	11	3	7	4	7	5	12	6	18	7	28	8	43	10	4	11	28	12
50	2	11	3	7	4	7	5	11	6	18	7	28	8	42	10	3	11	27	10
52	2	11	3	7	4	7	5	11	6	18	7	28	8	42	10	2	11	25	8
54	2	11	3	7	4	7	5	10	6	17	7	27	8	41	10	1	11	23	6
56	2	11	3	7	4	7	5	10	6	17	7	27	8	40	9	59	11	21	4
58	2	11	3	6	4	7	5	9	6	16	7	26	8	39	9	58	11	20	2
60	2	11	3	6	4	7	5	8	6	16	7	25	8	38	9	56	11	18	0

S V B T R A H E

Horæ 17. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 13. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Ho-

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli

Horæ 23. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.
Horæ 19. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	4 38	3 54	3 15	2 34	1 51	1 8	0 20	0 28	1 19	60
2	4 38	3 54	3 15	2 34	1 51	1 8	0 20	0 28	1 19	58
4	4 38	3 54	3 15	2 34	1 51	1 8	0 20	0 28	1 18	56
6	4 38	3 54	3 15	2 34	1 51	1 8	0 20	0 28	1 18	54
8	4 38	3 54	3 15	2 34	1 51	1 8	0 20	0 28	1 18	52
10	4 38	3 54	3 15	2 34	1 51	1 8	0 20	0 28	1 18	50
12	4 38	3 54	3 15	2 34	1 50	1 8	0 20	0 28	1 18	48
14	4 38	3 54	3 14	2 34	1 50	1 7	0 20	0 28	1 18	46
16	4 38	3 53	3 14	2 34	1 50	1 7	0 20	0 28	1 18	44
18	4 38	3 53	3 14	2 33	1 50	1 7	0 20	0 28	1 18	42
20	4 38	3 53	3 14	2 33	1 50	1 7	0 20	0 28	1 17	40
22	4 37	3 53	3 14	2 33	1 50	1 7	0 20	0 28	1 17	38
24	4 37	3 53	3 13	2 33	1 50	1 7	0 20	0 28	1 17	36
26	4 37	3 53	3 13	2 33	1 50	1 7	0 20	0 28	1 17	34
28	4 37	3 52	3 13	2 32	1 50	1 6	0 20	0 27	1 17	32
30	4 36	3 52	3 13	2 32	1 50	1 6	0 20	0 27	1 17	30
32	4 36	3 52	3 13	2 32	1 49	1 6	0 20	0 27	1 17	28
34	4 36	3 52	3 12	2 32	1 49	1 6	0 20	0 27	1 16	26
36	4 35	3 52	3 12	2 31	1 49	1 6	0 20	0 27	1 16	24
38	4 35	3 52	3 12	2 31	1 49	1 6	0 20	0 27	1 16	22
40	4 34	3 51	3 12	2 31	1 49	1 5	0 20	0 27	1 16	20
42	4 34	3 51	3 12	2 31	1 49	1 5	0 20	0 27	1 16	18
44	4 34	3 51	3 11	2 31	1 48	1 5	0 20	0 27	1 16	16
46	4 33	3 50	3 11	2 31	1 48	1 5	0 20	0 27	1 15	14
48	4 33	3 50	3 11	2 30	1 48	1 5	0 19	0 27	1 15	12
50	4 33	3 50	3 11	2 30	1 48	1 5	0 19	0 27	1 15	10
52	4 32	3 49	3 10	2 30	1 48	1 4	0 19	0 26	1 15	8
54	4 32	3 49	3 10	2 30	1 48	1 4	0 19	0 26	1 15	6
56	4 32	3 48	3 10	2 30	1 47	1 4	0 19	0 26	1 14	4
58	4 31	3 48	3 10	2 29	1 47	1 4	0 19	0 26	1 14	2
60	4 31	3 48	3 9	2 29	1 47	1 4	0 19	0 26	1 14	0

	ADDE							SVBTRAHE		

Horæ 16. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.
Horæ 12. Aſcenſionis rectæ medij Cœli pro Domo Secunda.

Horæ

ADDE

Poli	47		48		49		50		51		52		53		54		55		Poli

Horæ 23 Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 19. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M	G.	M.	G.	M.	G.	M.	M
0	2	11	3	6	4	7	5	8	6	16	7	25	8	38	9	56	11	18	60
2	2	11	3	6	4	7	5	8	6	16	7	24	8	37	9	55	11	16	58
4	2	11	3	6	4	6	5	7	6	15	7	23	8	36	9	53	11	14	56
6	2	11	3	6	4	6	5	7	6	15	7	23	8	35	9	52	11	13	54
8	2	11	3	5	4	6	5	6	6	14	7	22	8	34	9	50	11	11	52
10	2	11	3	5	4	6	5	5	6	14	7	21	8	33	9	49	11	9	50
12	2	11	3	5	4	6	5	4	6	13	7	20	8	32	9	47	11	7	48
14	2	11	3	5	4	6	5	4	6	12	7	19	8	31	9	46	11	5	46
16	2	10	3	5	4	5	5	3	6	11	7	18	8	28	9	44	11	3	44
18	2	10	3	5	4	5	5	3	6	11	7	17	8	29	9	42	11	1	42
20	2	10	3	4	4	5	5	2	6	10	7	16	8	27	9	40	10	59	40
22	2	10	3	4	4	5	5	2	6	9	7	15	8	26	9	39	10	57	38
24	2	10	3	4	4	4	5	1	6	8	7	14	8	25	9	37	10	55	36
26	2	10	3	4	4	4	5	1	6	7	7	13	8	24	9	35	10	53	34
28	2	10	3	3	4	3	5	0	6	6	7	12	8	22	9	33	10	51	32
30	2	10	3	3	4	3	5	0	6	5	7	11	8	21	9	32	10	49	30
32	2	9	3	3	4	2	4	59	6	4	7	10	8	19	9	30	10	47	28
34	2	9	3	3	4	1	4	59	6	3	7	9	8	17	9	28	10	45	26
36	2	9	3	2	4	0	4	58	6	2	7	8	8	15	9	26	10	42	24
38	2	9	3	2	4	0	4	58	6	1	7	7	8	14	9	24	10	40	22
40	2	9	3	2	3	59	4	57	6	0	7	5	8	12	9	22	10	37	20
42	2	9	3	2	3	58	4	56	5	59	7	4	8	10	9	20	10	35	18
44	2	8	3	1	3	57	4	55	5	57	7	2	8	8	9	18	10	32	16
46	2	8	3	1	3	57	4	54	5	56	7	0	8	7	9	16	10	30	14
48	2	8	3	0	3	56	4	53	5	55	6	58	8	5	9	14	10	27	12
5	2	8	3	0	3	55	4	52	5	54	6	57	8	3	9	12	10	25	10
52	2	7	2	59	3	54	4	51	5	53	6	55	8	1	9	10	10	22	8
54	2	7	2	59	3	53	4	50	5	52	6	54	7	59	9	8	10	20	6
56	2	6	2	58	3	52	4	49	5	50	6	52	7	57	9	5	10	17	4
58	2	6	2	58	3	51	4	48	5	49	6	51	7	56	9	3	10	15	2
60	2	5	2	57	3	50	4	47	5	47	6	49	7	54	9	1	10	12	0

SVBTRAHE

Horæ 16. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima.
Horæ 12. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

SVBTRAHE															ADDE				
Poli	38		39		40		41		42		43		44		45		46		Poli

Horæ 0. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 20. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M	G.	M.	G.	M.	G.	M.	G.	M.	M
0	4	31	3	48	3	9	2	29	1	47	1	4	0	19	0	26	1	14	60
2	4	31	3	48	3	9	2	29	1	47	1	4	0	19	0	26	1	14	58
4	4	30	3	47	3	9	2	28	1	47	1	4	0	19	0	26	1	13	56
6	4	30	3	47	3	9	2	28	1	47	1	4	0	19	0	26	1	13	54
8	4	29	3	47	3	8	2	28	1	47	1	3	0	19	0	26	1	13	52
10	4	29	3	46	3	8	2	28	1	46	1	3	0	19	0	26	1	13	50
12	4	28	3	46	3	7	2	27	1	46	1	3	0	19	0	26	1	12	48
14	4	27	3	45	3	7	2	27	1	46	1	3	0	19	0	26	1	12	46
16	4	26	3	45	3	6	2	26	1	45	1	3	0	19	0	26	1	12	44
18	4	26	3	44	3	6	2	26	1	45	1	3	0	19	0	26	1	12	42
20	4	25	3	43	3	5	2	25	1	45	1	3	0	19	0	26	1	12	40
22	4	24	3	43	3	5	2	25	1	44	1	2	0	19	0	26	1	11	38
24	4	22	3	42	3	4	2	24	1	44	1	2	0	19	0	25	1	11	36
26	4	23	3	41	3	4	2	24	1	44	1	2	0	19	0	25	1	11	34
28	4	21	3	40	3	3	2	23	1	43	1	2	0	19	0	25	1	11	32
30	4	21	3	39	3	2	2	23	1	43	1	2	0	19	0	25	1	11	30
32	4	20	3	38	3	1	2	23	1	42	1	2	0	19	0	25	1	10	28
34	4	19	3	38	3	1	2	22	1	42	1	2	0	19	0	25	1	10	26
36	4	18	3	37	3	0	2	22	1	42	1	1	0	18	0	25	1	10	24
38	4	17	3	36	3	0	2	22	1	41	1	1	0	18	0	25	1	10	22
40	4	16	3	35	2	59	2	21	1	41	1	1	0	18	0	25	1	10	20
42	4	16	3	35	2	59	2	21	1	41	1	1	0	18	0	25	1	10	18
44	4	15	3	34	2	58	2	20	1	40	1	0	0	18	0	25	1	9	16
46	4	15	3	33	2	58	2	20	1	40	1	0	0	18	0	25	1	9	14
48	4	14	3	32	2	57	2	19	1	40	1	0	0	18	0	25	1	9	12
50	4	13	3	32	2	57	2	19	1	39	1	0	0	18	0	25	1	9	10
52	4	12	3	31	2	56	2	18	1	39	0	59	0	18	0	25	1	8	8
54	4	12	3	31	2	56	2	18	1	39	0	59	0	18	0	25	1	8	6
56	4	11	3	30	2	55	2	17	1	38	0	59	0	18	0	24	1	8	4
58	4	11	3	29	2	55	2	17	1	38	0	59	0	18	0	24	1	8	2
60	4	10	3	28	2	54	2	16	1	37	0	58	0	18	0	24	1	7	0
ADDE															SVBTRAHE				

Horæ 15. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 11. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Ho-

A D D E

Poli	47		48		49		50		51		52		53		54		55		Poli
	Horæ 0. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.																		
	Horæ 20. Aſcenſionis rectæ Medij Cęli pro Domó Secunda.																		
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	5	2	57	3	50	4	47	5	47	6	49	7	53	9	1	10	12	60
2	2	5	2	56	3	50	4	46	5	46	6	48	7	51	8	59	10	9	58
4	2	4	2	55	3	49	4	45	5	44	6	46	7	49	8	56	10	6	56
6	2	4	2	55	3	48	4	44	5	43	6	44	7	48	8	54	10	4	54
8	2	3	2	54	3	47	4	42	5	42	6	42	7	46	8	52	10	1	52
10	2	3	2	54	3	46	4	41	5	41	6	41	7	44	8	50	9	59	50
12	2	2	2	53	3	45	4	40	5	39	6	39	7	42	8	47	9	56	48
14	2	2	2	52	3	45	4	39	5	37	6	38	7	40	8	45	9	54	46
16	2	1	2	51	3	44	4	38	5	36	6	36	7	38	8	43	9	51	44
18	2	1	2	51	3	43	4	37	5	35	6	34	7	36	8	41	9	48	42
20	2	0	2	50	3	42	4	36	5	34	6	32	7	34	8	38	9	45	40
22	2	0	2	50	3	41	4	35	5	33	6	31	7	32	8	36	9	43	38
24	1	59	2	49	3	40	4	34	5	31	6	29	7	30	8	34	9	40	36
26	1	59	2	49	3	40	4	33	5	30	6	28	7	28	8	32	9	38	34
28	1	58	2	48	3	39	4	32	5	28	6	26	7	26	8	29	9	35	32
30	1	58	2	48	3	38	4	31	5	27	6	24	7	24	8	27	9	32	30
32	1	57	2	47	3	37	4	30	5	26	6	22	7	22	8	24	9	29	28
34	1	57	2	47	3	37	4	29	5	25	6	21	7	21	8	22	9	27	26
36	1	56	2	46	3	36	4	28	5	23	6	19	7	19	8	20	9	24	24
38	1	56	2	46	3	35	4	27	5	22	6	18	7	17	8	18	9	22	22
40	1	55	2	45	3	34	4	26	5	20	6	16	7	15	8	15	9	19	20
42	1	55	2	45	3	33	4	25	5	19	6	14	7	13	8	13	9	16	18
44	1	54	2	44	3	32	4	24	5	17	6	12	7	11	8	11	9	13	16
46	1	54	2	43	3	31	4	23	5	16	6	11	7	9	8	9	9	11	14
48	1	53	2	42	3	30	4	21	5	15	6	9	7	7	8	6	9	8	12
50	1	53	2	42	3	30	4	20	5	14	6	8	7	5	8	4	9	6	10
52	1	52	2	41	3	29	4	19	5	12	6	6	7	3	8	2	9	3	8
54	1	52	2	40	3	28	4	18	5	11	6	4	7	1	8	0	9	0	6
56	1	51	2	39	3	27	4	17	5	9	6	2	6	59	7	57	8	57	4
58	1	51	2	38	3	26	4	16	5	8	6	1	6	57	7	55	8	55	2
60	1	50	2	37	3	25	4	14	5	6	5	59	6	55	7	52	8	52	0

S V B T R A H E

Horæ 15. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima.
Horæ 11. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

	SVBTRAHE														ADDE				
Poli	38		39		40		41		42		43		44		45		46		Poli
	Horæ 1. Aſcenſionis rectæ medij Cęli pro Domo Duodecima. Horæ 21. Aſcenſionis rectæ medij Cęli pro Domo Secunda.																		
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	4	10	3	28	2	54	2	16	1	37	0	58	0	18	0	24	1	7	60
2	4	9	3	28	2	53	2	16	1	37	0	58	0	18	0	24	1	7	58
4	4	8	3	27	2	52	2	15	1	36	0	58	0	18	0	24	1	7	56
6	4	7	3	26	2	52	2	15	1	36	0	58	0	18	0	24	1	7	54
8	4	6	3	25	2	51	2	14	1	36	0	57	0	17	0	24	1	6	52
10	4	5	3	25	2	51	2	14	1	35	0	57	0	17	0	24	1	6	50
12	4	4	3	24	2	50	2	13	1	35	0	57	0	17	0	24	1	6	48
14	4	3	3	23	2	49	2	13	1	35	0	57	0	17	0	24	1	6	46
16	4	2	3	22	2	48	2	12	1	34	0	56	0	17	0	23	1	5	44
18	4	2	3	22	2	48	2	12	1	34	0	56	0	17	0	23	1	5	42
20	4	1	3	21	2	47	2	11	1	34	0	56	0	17	0	23	1	5	40
22	4	0	3	20	2	47	2	11	1	33	0	56	0	17	0	23	1	5	38
24	3	59	3	19	2	46	2	10	1	33	0	55	0	17	0	23	1	4	36
26	3	58	3	19	2	45	2	10	1	33	0	55	0	17	0	23	1	4	34
28	3	57	3	18	2	44	2	9	1	32	0	55	0	17	0	23	1	4	32
30	3	56	3	17	2	44	2	9	1	32	0	55	0	17	0	23	1	3	30
32	3	55	3	16	2	43	2	8	1	31	0	54	0	17	0	23	1	3	28
34	3	54	3	16	2	42	2	8	1	31	0	54	0	17	0	23	1	3	26
36	3	53	3	15	2	41	2	7	1	30	0	54	0	17	0	22	1	2	24
38	3	52	3	14	2	41	2	7	1	30	0	54	0	17	0	22	1	2	22
40	3	51	3	13	2	40	2	6	1	30	0	53	0	17	0	22	1	1	20
42	3	50	3	13	2	40	2	6	1	29	0	53	0	17	0	22	1	1	18
44	3	49	3	12	2	39	2	5	1	29	0	53	0	16	0	22	1	0	16
46	3	48	3	11	2	39	2	5	1	29	0	53	0	16	0	22	1	0	14
48	3	47	3	10	2	38	2	4	1	28	0	53	0	16	0	21	1	0	12
50	3	46	3	9	2	37	2	4	1	28	0	53	0	16	0	21	0	59	10
52	3	45	3	8	2	36	2	3	1	28	0	52	0	16	0	21	0	59	8
54	3	45	3	7	2	36	2	2	1	27	0	52	0	16	0	21	0	59	6
56	3	44	3	6	2	35	2	1	1	27	0	52	0	16	0	21	0	58	4
58	3	43	3	6	2	35	2	1	1	27	0	52	0	16	0	21	0	58	2
60	3	42	3	5	2	34	2	0	1	26	0	51	0	16	0	20	0	58	0
	ADDE														SVBTRAHE				

Horæ 14. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.
Horæ 10 Aſcenſionis rectæ medij Cœli pro Domo Secunda.

Ho-

A D D E

Horæ 1. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.
Horæ 21. Aſcenſionis rectæ medij Cœli pro Domo Secunda.

Poli	47	48	49	50	51	52	53	54	55	Poli
M	G. M.	G. M.	M. G.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	1 50	2 37	3 25	4 14	5 6	5 59	6 55	7 52	8 52	60
2	1 50	2 37	3 24	4 13	5 5	5 58	6 53	7 50	8 50	58
4	1 50	2 36	3 23	4 12	5 4	5 56	6 51	7 48	8 47	56
6	1 50	2 36	3 23	4 11	5 3	5 54	6 49	7 46	8 44	54
8	1 49	2 35	3 22	4 9	5 1	5 52	6 47	7 43	8 41	52
10	1 49	2 35	3 21	4 8	5 0	5 51	6 45	7 41	8 39	50
12	1 48	2 34	3 20	4 7	4 58	5 49	6 43	7 39	8 36	48
14	1 48	2 34	3 19	4 6	4 57	5 48	6 41	7 37	8 34	46
16	1 47	2 33	3 18	4 5	4 55	5 46	6 39	7 34	8 31	44
18	1 47	2 32	3 17	4 4	4 54	5 44	6 37	7 32	8 28	42
20	1 46	2 31	3 16	4 3	4 53	5 42	6 35	7 30	8 25	40
22	1 46	2 30	3 15	4 2	4 52	5 41	6 33	7 28	8 23	38
24	1 45	2 29	3 14	4 0	4 50	5 39	6 31	7 25	8 20	36
26	1 45	2 29	3 13	3 59	4 49	5 38	6 29	7 23	8 18	34
28	1 44	2 28	3 12	3 58	4 47	5 36	6 27	7 21	8 15	32
30	1 44	2 28	3 12	3 57	4 46	5 34	6 25	7 19	8 12	30
32	1 43	2 27	3 11	3 56	4 44	5 32	6 23	7 16	8 9	28
34	1 43	2 27	3 10	3 55	4 43	5 31	6 21	7 14	8 7	26
36	1 42	2 26	3 9	3 53	4 41	5 29	6 19	7 11	8 4	24
38	1 42	2 25	3 8	3 52	4 40	5 28	6 17	7 9	8 2	22
40	1 41	2 24	3 7	3 51	4 39	5 26	6 15	7 6	7 59	20
42	1 41	2 23	3 6	3 50	4 38	5 24	6 13	7 4	7 56	18
44	1 40	2 22	3 5	3 49	4 36	5 22	6 11	7 2	7 53	16
46	1 40	2 22	3 4	3 48	4 35	5 21	6 9	7 0	7 51	14
48	1 39	2 21	3 3	3 46	4 33	5 19	6 7	6 57	7 48	12
50	1 39	2 21	3 2	3 45	4 32	5 17	6 5	6 55	7 46	10
52	1 38	2 20	3 1	3 44	4 30	5 15	6 3	6 53	7 43	8
54	1 38	2 19	3 0	3 43	4 29	5 14	6 1	6 51	7 40	4
56	1 37	2 18	2 59	3 42	4 27	5 12	5 59	6 48	7 37	2
58	1 37	2 17	2 58	3 41	4 26	5 10	5 57	6 46	7 35	1
60	1 36	2 16	2 57	3 39	4 24	5 8	5 55	6 43	7 32	0

S V B T R A H E

Horæ 14. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 10. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.

Ho-

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 2. Aſcenſionis rectæ medij Cœli pro Domo Duodecima. Horæ 22. Aſcenſionis rectæ medij Cęli pro Domo Secunda.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	3 42	3 5	2 34	2 0	1 26	0 51	0 16	0 20	0 58	60
2	3 42	3 4	2 33	2 0	1 26	0 51	0 16	0 20	0 58	58
4	3 41	3 3	2 32	1 59	1 25	0 51	0 16	0 20	0 57	56
6	3 40	3 3	2 32	1 59	1 25	0 51	0 16	0 20	0 57	54
8	3 39	3 2	2 31	1 58	1 25	0 50	0 16	0 20	0 57	52
10	3 38	3 1	2 30	1 58	1 24	0 50	0 16	0 20	0 57	50
12	3 37	3 0	2 29	1 57	1 24	0 50	0 15	0 20	0 56	48
14	3 36	3 0	2 29	1 57	1 24	0 50	0 15	0 20	0 56	46
16	3 35	2 59	2 28	1 56	1 23	0 49	0 15	0 20	0 56	44
18	3 34	2 58	2 27	1 56	1 23	0 49	0 15	0 20	0 56	42
20	3 33	2 57	2 26	1 55	1 22	0 49	0 15	0 19	0 55	40
22	3 32	2 57	2 26	1 54	1 22	0 49	0 15	0 19	0 55	38
24	3 31	2 56	2 25	1 53	1 22	0 49	0 15	0 19	0 54	36
26	3 30	2 55	2 24	1 53	1 21	0 48	0 15	0 19	0 54	34
28	3 29	2 54	2 23	1 52	1 21	0 48	0 15	0 19	0 53	32
30	3 28	2 53	2 23	1 52	1 21	0 48	0 15	0 19	0 53	30
32	3 27	2 52	2 22	1 51	1 20	0 48	0 15	0 19	0 53	28
34	3 26	2 51	2 21	1 51	1 20	0 48	0 15	0 19	0 53	26
36	3 25	2 50	2 20	1 50	1 19	0 47	0 15	0 18	0 52	24
38	3 24	2 50	2 20	1 50	1 19	0 47	0 15	0 18	0 52	22
40	3 23	2 49	2 19	1 49	1 19	0 47	0 14	0 18	0 51	20
42	3 22	2 48	2 18	1 49	1 18	0 47	0 14	0 18	0 51	18
44	3 21	2 47	2 17	1 48	1 18	0 47	0 14	0 18	0 50	16
46	3 20	2 46	2 17	1 48	1 18	0 47	0 14	0 18	0 50	14
48	3 19	2 45	2 16	1 47	1 17	0 46	0 14	0 17	0 50	12
50	3 18	2 44	2 16	1 47	1 17	0 46	0 14	0 17	0 50	10
52	3 17	2 43	2 15	1 46	1 16	0 46	0 14	0 17	0 49	8
54	3 16	2 42	2 14	1 46	1 16	0 46	0 14	0 17	0 49	6
56	3 15	2 41	2 13	1 45	1 15	0 45	0 14	0 17	0 48	4
58	3 14	2 40	2 12	1 45	1 15	0 45	0 14	0 17	0 48	2
60	3 13	2 39	2 12	1 44	1 15	0 45	0 14	0 16	0 48	0
	ADDE							SVBTRAHE		
Horæ 13. Aſcenſionis rectæ medij Cœli pro Domo Duodecima. Horæ 9. Aſcenſionis rectæ medij Cœli pro Domo Secunda.										

Horæ

ADDE

Horæ 2. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 22. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Poli	47	48	49	50	51	52	53	54	55	Poli
M	G. M.	G. M.	G. M.	G M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	1 36	2 16	2 57	3 39	4 24	5 8	5 55	6 43	7 32	60
2	1 36	2 16	2 56	3 38	4 23	5 7	5 54	6 41	7 30	58
4	1 35	2 15	2 55	3 37	4 21	5 5	5 52	6 39	7 27	56
6	1 35	2 15	2 54	3 36	4 20	5 4	5 50	6 37	7 25	54
8	1 34	2 14	2 53	3 35	4 19	5 2	5 48	6 34	7 22	52
10	1 34	2 13	2 52	3 34	4 18	5 0	5 46	6 32	7 20	50
12	1 33	2 12	2 51	3 32	4 16	4 58	5 44	6 30	7 17	48
14	1 33	2 12	2 50	3 31	4 15	4 57	5 42	6 28	7 15	46
16	1 32	2 11	2 49	3 30	4 13	4 55	5 40	6 25	7 12	44
18	1 32	2 11	2 48	3 29	4 12	4 54	5 38	6 23	7 10	42
20	1 31	2 10	2 47	3 28	4 10	4 52	5 36	6 21	7 7	40
22	1 31	2 9	2 46	3 27	4 9	4 50	5 34	6 19	7 5	38
24	1 30	2 8	2 45	3 25	4 7	4 48	5 32	6 16	7 2	36
26	1 30	2 8	2 44	3 24	4 6	4 47	5 30	6 14	7 0	34
28	1 29	2 7	2 43	3 23	4 4	4 45	5 28	6 12	6 57	32
30	1 29	2 6	2 42	3 22	4 3	4 43	5 27	6 10	6 55	30
32	1 28	2 5	2 41	3 21	4 1	4 41	5 25	6 7	6 52	28
34	1 28	2 5	2 40	3 20	4 0	4 40	5 23	6 5	6 50	26
36	1 27	2 4	2 39	3 18	3 59	4 38	5 21	6 3	6 47	24
38	1 27	2 3	2 38	3 17	3 58	4 36	5 19	6 1	6 45	22
40	1 26	2 2	2 37	3 16	3 56	4 34	5 17	5 58	6 42	20
42	1 26	2 1	2 36	3 15	3 55	4 33	5 15	5 56	6 40	18
44	1 25	2 1	2 35	3 13	3 53	4 31	5 13	5 54	6 37	16
46	1 25	2 0	2 34	3 12	3 52	4 29	5 11	5 52	6 35	14
48	1 24	2 0	2 33	3 11	3 50	4 27	5 9	5 49	6 32	12
50	1 24	1 59	2 32	3 10	3 49	4 26	5 7	5 47	6 30	10
52	1 23	1 58	2 31	3 8	3 47	4 24	5 5	5 45	6 27	8
54	1 23	1 58	2 30	3 7	3 46	4 23	5 3	5 43	6 25	6
56	1 22	1 57	2 29	3 6	3 44	4 21	5 1	5 40	6 22	4
58	1 22	1 56	2 29	3 5	3 43	4 20	4 59	5 38	6 20	2
60	1 21	1 55	2 28	3 3	3 41	4 18	4 57	5 36	6 17	0

SVBTRAHE

Horæ 13. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 9. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Ho-

SVBTRAHE																ADDE			
Poli	38		39		40		41		42		43		44		45		46		Poli

Horæ 3. Aſcenſionis rectæ Medij Cœlî pro Domo Duodecima.
Horæ 23. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.

M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	3	13	2	39	2	12	1	44	1	15	0	45	0	14	0	16	0	48	60
2	3	12	2	39	2	12	1	43	1	15	0	45	0	14	0	16	0	48	58
4	3	11	2	38	2	11	1	42	1	14	0	44	0	14	0	16	0	47	56
6	3	10	2	37	2	10	1	42	1	14	0	44	0	14	0	16	0	47	54
8	3	8	2	36	2	9	1	41	1	13	0	43	0	13	0	16	0	47	52
10	3	7	2	35	2	9	1	41	1	13	0	43	0	13	0	16	0	47	50
12	3	6	2	34	2	8	1	40	1	12	0	42	0	13	0	16	0	46	48
14	3	5	2	34	2	7	1	39	1	12	0	42	0	13	0	16	0	46	46
16	3	4	2	33	2	6	1	38	1	11	0	42	0	13	0	16	0	46	44
18	3	3	2	32	2	6	1	38	1	11	0	41	0	13	0	16	0	46	42
20	3	2	2	31	2	5	1	37	1	10	0	41	0	13	0	15	0	45	40
22	3	1	2	30	2	4	1	37	1	10	0	41	0	13	0	15	0	45	38
24	2	59	2	29	2	3	1	36	1	9	0	40	0	13	0	15	0	45	36
26	2	58	2	28	2	3	1	35	1	9	0	40	0	13	0	15	0	45	34
28	2	57	2	27	2	2	1	34	1	8	0	40	0	12	0	15	0	44	32
30	2	56	2	26	2	1	1	34	1	8	0	40	0	12	0	15	0	44	30
32	2	55	2	25	2	0	1	33	1	7	0	39	0	12	0	15	0	44	28
34	2	54	2	24	1	59	1	33	1	7	0	39	0	12	0	15	0	44	26
36	2	53	2	23	1	58	1	32	1	6	0	39	0	12	0	15	0	43	24
38	2	52	2	22	1	58	1	32	1	6	0	39	0	12	0	15	0	43	22
40	2	50	2	21	1	57	1	31	1	5	0	38	0	12	0	15	0	43	20
42	2	49	2	20	1	56	1	30	1	5	0	38	0	12	0	15	0	42	18
41	2	48	2	19	1	55	1	29	1	4	0	38	0	11	0	15	0	42	16
46	2	47	2	18	1	54	1	29	1	4	0	38	0	11	0	15	0	42	14
48	2	46	2	17	1	53	1	28	1	3	0	37	0	11	0	15	0	41	12
50	2	45	2	16	1	52	1	28	1	3	0	37	0	11	0	15	0	41	10
52	2	44	2	15	1	51	1	27	1	2	0	36	0	11	0	14	0	41	8
54	2	43	2	14	1	50	1	27	1	2	0	36	0	11	0	14	0	41	6
56	2	41	2	13	1	49	1	26	1	1	0	36	0	11	0	14	0	40	4
58	2	40	2	12	1	49	1	26	1	1	0	36	0	11	0	14	0	40	2
60	2	38	2	11	1	48	1	25	1	0	0	35	0	11	0	14	0	40	6

ADDE | SVBTRAHE

Horæ 12. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima.
Horæ 8. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

Ho-

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 3. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.										
Horæ 23. Aſcenſionis rectæ medij Cœli pro Domo Secunda.										
M	G M.	G. M.	M. G	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	1 21	1 55	2 28	3 3	3 41	4 18	4 57	5 36	6 17	60
2	1 21	1 55	2 27	3 2	3 40	4 16	4 55	5 34	6 15	58
4	1 20	1 54	2 26	3 1	3 39	4 14	4 53	5 32	6 12	56
6	1 20	1 53	2 25	3 0	3 38	4 13	4 52	5 30	6 10	54
8	1 19	1 52	2 24	2 59	3 36	4 11	4 50	5 27	6 7	52
10	1 19	1 52	2 24	2 58	3 35	4 10	4 48	5 25	6 5	50
12	1 18	1 51	2 23	2 57	3 33	4 8	4 46	5 23	6 2	48
14	1 18	1 51	2 22	2 56	3 32	4 7	4 44	5 21	6 0	46
16	1 17	1 50	2 21	2 55	3 30	4 5	4 42	5 19	5 57	44
18	1 17	1 49	2 20	2 54	3 29	4 4	4 40	5 17	5 55	42
20	1 16	1 48	2 19	2 53	3 28	4 2	4 38	5 15	5 52	40
22	1 16	1 48	2 19	2 52	3 27	4 1	4 36	5 13	5 50	38
24	1 15	1 47	2 18	2 51	3 25	3 59	4 34	5 10	5 47	36
26	1 15	1 47	2 17	2 50	3 24	3 58	4 32	5 8	5 45	34
28	1 14	1 46	2 16	2 49	3 22	4 56	4 30	5 6	5 42	32
30	1 14	1 46	2 16	2 48	3 26	3 54	4 28	5 4	5 40	30
32	1 13	1 44	2 15	2 46	3 19	3 52	4 26	5 2	5 37	28
34	1 13	1 44	2 14	2 45	3 18	3 51	4 25	5 0	5 35	26
36	1 12	1 43	2 13	2 44	3 17	3 49	4 23	4 58	5 32	24
38	1 12	1 43	2 12	2 43	3 16	3 48	4 21	4 56	5 30	22
40	1 11	1 42	2 11	2 42	3 14	3 46	4 19	4 54	5 27	20
42	1 11	1 41	2 11	2 41	3 13	3 44	4 17	4 52	5 25	18
44	1 10	1 40	2 10	2 40	3 11	3 42	4 15	4 49	5 22	16
46	1 10	1 40	2 9	2 39	3 10	3 41	4 13	4 47	5 20	14
48	1 9	1 39	2 8	2 37	3 8	3 39	4 11	4 45	5 17	12
50	1 9	1 38	2 7	2 36	3 7	3 37	4 9	4 43	5 15	10
52	1 8	1 37	2 6	2 35	3 6	3 35	4 7	4 41	5 12	8
54	1 8	1 37	2 5	2 34	3 5	3 34	4 5	4 39	5 10	4
56	1 7	1 36	2 4	2 33	3 3	3 32	4 3	4 37	5 7	2
58	1 7	1 35	2 3	2 32	3 2	3 31	4 2	4 35	5 5	1
60	1 6	1 34	2 2	2 30	3 0	3 29	4 0	4 32	5 2	0

S V B T R A H E.

Horæ 12. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 8. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.

	SVBTRAHE															ADDE			
Poli	38		39		40		41		42		43		44		45		46		Poli

Horæ 4. Aſcenſionis rectæ Medij Cœli pro Dowo Duodecima.
Horæ 0. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	38	2	11	1	48	1	25	1	0	0	35	0	11	0	14	0	40	60
2	2	37	2	10	1	47	1	25	1	0	0	35	0	11	0	14	0	40	58
4	2	36	2	9	1	46	1	24	1	0	0	35	0	11	0	14	0	39	56
6	2	35	2	8	1	46	1	24	0	59	0	35	0	11	0	14	0	39	54
8	2	34	2	7	1	45	1	23	0	59	0	35	0	10	0	13	0	38	52
10	2	33	2	6	1	44	1	23	0	59	0	35	0	10	0	13	0	38	50
12	2	32	2	5	1	43	1	22	0	58	0	34	0	10	0	13	0	38	48
14	2	31	2	4	1	43	1	21	0	58	0	34	0	10	0	13	0	37	46
16	2	29	2	3	1	42	1	20	0	57	0	34	0	10	0	13	0	37	44
18	2	28	2	2	1	41	1	20	0	57	0	34	0	10	0	13	0	37	42
20	2	27	2	1	1	40	1	19	0	56	0	34	0	10	0	13	0	36	40
22	2	26	2	0	1	40	1	19	0	56	0	34	0	10	0	13	0	36	38
24	2	25	1	59	1	39	1	18	0	55	0	33	0	10	0	12	0	36	36
26	2	24	1	59	1	38	1	18	0	55	0	33	0	10	0	12	0	35	34
28	2	23	1	58	1	37	1	17	0	54	0	33	0	10	0	12	0	35	32
30	2	22	1	57	1	37	1	17	0	54	0	33	0	10	0	12	0	35	30
32	2	20	1	56	1	36	1	16	0	53	0	32	0	10	0	12	0	34	28
34	2	19	1	55	1	35	1	15	0	53	0	32	0	10	0	12	0	34	26
36	2	18	1	54	1	34	1	14	0	52	0	32	0	9	0	12	0	34	24
38	2	17	1	53	1	33	1	14	0	52	0	32	0	9	0	12	0	34	22
40	2	16	1	52	1	32	1	13	0	51	0	31	0	9	0	12	0	33	20
42	2	15	1	51	1	31	1	13	0	51	0	31	0	9	0	12	0	33	18
44	2	13	1	50	1	30	1	12	0	50	0	30	0	9	0	11	0	33	16
46	2	12	1	49	1	30	1	11	0	50	0	30	0	9	0	11	0	33	14
48	2	10	1	48	1	29	1	10	0	49	0	30	0	9	0	11	0	32	12
50	2	9	1	47	1	28	1	10	0	49	0	30	0	9	0	11	0	32	10
52	2	8	1	46	1	27	1	9	0	48	0	29	0	9	0	11	0	32	8
54	2	7	1	45	1	26	1	8	0	48	0	29	0	9	0	11	0	32	6
56	2	6	1	44	1	25	1	7	0	47	0	29	0	9	0	11	0	31	4
58	2	5	1	43	1	24	1	6	0	47	0	29	0	9	0	11	0	31	2
60	2	3	1	41	1	23	1	5	0	46	0	28	0	9	0	10	0	31	0

	ADDE	SVBTRAHE

Horæ 11. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 7. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.

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Horæ 4. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 0. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	1	6	1	34	2	2	2	30	3	0	3	29	4	0	4	32	5	2	60
2	1	6	1	34	2	1	2	29	2	59	3	28	3	58	4	30	5	0	58
4	1	5	1	33	2	0	2	28	2	57	3	26	3	56	4	28	4	58	56
6	1	5	1	32	1	59	2	27	2	56	3	25	3	54	4	26	4	56	54
8	1	4	1	31	1	58	2	25	2	54	3	23	3	52	4	23	4	53	52
10	1	4	1	30	1	57	2	24	2	53	3	22	3	51	4	21	4	51	50
12	1	3	1	29	1	56	2	23	2	52	3	20	3	49	4	19	4	49	48
14	1	3	1	29	1	55	2	22	2	51	3	18	3	47	4	17	4	47	46
16	1	2	1	28	1	54	2	20	2	49	3	16	3	45	4	15	4	44	44
18	1	2	1	27	1	53	2	19	2	48	3	15	3	43	4	13	4	42	42
20	1	1	1	26	1	52	2	18	2	45	3	13	3	41	4	11	4	39	40
22	1	1	1	26	1	51	2	17	2	46	3	11	3	39	4	8	4	37	38
24	1	0	1	25	1	50	2	15	2	43	3	9	3	37	4	6	4	34	36
26	1	0	1	24	1	49	2	14	2	42	3	7	3	35	4	4	4	32	34
28	0	59	1	23	1	48	2	13	2	40	3	6	3	33	4	1	4	29	32
30	0	59	1	23	1	47	2	12	2	39	3	4	3	32	3	59	4	27	30
32	0	58	1	22	1	46	2	10	2	37	3	2	3	30	3	57	4	24	28
34	0	58	1	21	1	45	2	9	2	36	3	0	3	28	3	55	4	22	26
36	0	57	1	20	1	44	2	8	2	35	2	58	3	26	3	53	4	19	24
38	0	57	1	20	1	43	2	7	2	34	2	57	3	24	3	51	4	17	22
40	0	56	1	19	1	42	2	6	2	32	2	55	3	22	3	49	4	15	20
42	0	56	1	19	1	41	2	5	2	31	2	53	3	20	3	47	4	13	18
44	0	55	1	18	1	40	2	4	2	29	2	51	3	18	3	44	4	10	16
46	0	55	1	17	1	39	2	3	2	28	2	50	3	16	3	42	4	8	14
48	0	54	1	16	1	38	2	1	2	26	2	48	3	14	3	40	4	5	12
50	0	54	1	16	1	37	2	0	2	25	2	47	3	12	3	38	4	3	10
52	0	53	1	15	1	36	1	59	2	23	2	45	3	10	3	36	4	1	8
54	0	53	1	14	1	35	1	58	2	20	2	44	3	8	3	34	3	59	6
56	0	52	1	13	1	34	1	57	2	20	2	42	3	6	3	31	3	56	4
58	0	51	1	13	1	33	1	56	2	19	2	41	3	4	3	29	3	54	2
60	0	50	1	12	1	32	1	55	2	17	2	39	3	2	3	27	3	51	0

SVBTRAHE

Horæ 11. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 7. Aſcenſionis rectæ Medii Cœli pro Domo Secunda.

SVBTRAHE																	ADDE			
Poli	38		39		40		41		42		43		44		45		46			Poli

Horæ 5. Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 1. Aſcenſionis rectæ Medij Cœli pro Domo Secunda.

M	G.	M.	G.	M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	3	1	41	1	23	1	5	0	46	0	28	0	9	0	10	0	31	60
2	2	2	1	40	1	23	1	5	0	46	0	28	0	9	0	10	0	31	58
4	2	0	1	39	1	22	1	4	0	45	0	27	0	9	0	10	0	30	56
6	1	59	1	38	1	21	1	4	0	45	0	27	0	9	0	10	0	30	54
8	1	58	1	37	1	20	1	3	0	45	0	27	0	8	0	10	0	29	52
10	1	57	1	36	1	20	1	3	0	44	0	27	0	8	0	10	0	29	50
12	1	56	1	35	1	19	1	2	0	44	0	26	0	8	0	10	0	28	48
14	1	55	1	34	1	18	1	2	0	44	0	26	0	8	0	10	0	28	46
16	1	53	1	33	1	17	1	1	0	43	0	26	0	8	0	9	0	28	44
18	1	52	1	32	1	17	1	0	0	43	0	26	0	8	0	9	0	27	42
20	1	51	1	31	1	16	0	59	0	42	0	25	0	8	0	9	0	27	40
22	1	50	1	30	1	15	0	59	0	42	0	25	0	8	0	9	0	27	38
24	1	48	1	29	1	14	0	58	0	41	0	25	0	8	0	9	0	26	36
26	1	47	1	28	1	14	0	58	0	41	0	25	0	8	0	9	0	26	34
28	1	46	1	27	1	13	0	57	0	40	0	24	0	8	0	9	0	26	32
30	1	45	1	26	1	12	0	57	0	40	0	24	0	8	0	9	0	25	30
32	1	43	1	25	1	11	0	56	0	39	0	24	0	8	0	8	0	25	28
34	1	42	1	24	1	10	0	55	0	39	0	24	0	8	0	8	0	24	26
36	1	40	1	22	1	9	0	54	0	38	0	23	0	7	0	8	0	24	24
38	1	39	1	21	1	8	0	54	0	38	0	23	0	7	0	8	0	24	22
40	1	38	1	20	1	7	0	53	0	37	0	23	0	7	0	8	0	23	20
42	1	37	1	19	1	6	0	52	0	37	0	23	0	7	0	8	0	23	18
4·	1	35	1	18	1	5	0	51	0	36	0	22	0	7	0	8	0	23	16
46	1	34	1	17	1	4	0	51	0	36	0	22	0	7	0	8	0	22	14
48	1	33	1	16	1	3	0	50	0	35	0	22	0	7	0	7	0	22	12
50	1	32	1	15	1	2	0	49	0	35	0	22	0	7	0	7	0	22	10
52	1	30	1	13	1	1	0	48	0	34	0	21	0	7	0	7	0	21	8
54	1	29	1	12	1	0	0	48	0	34	0	21	0	7	0	7	0	21	6
56	1	27	1	11	0	59	0	47	0	33	0	21	0	6	0	7	0	21	4
58	1	26	1	10	0	58	0	46	0	33	0	21	0	6	0	7	0	20	2
60	1	24	1	9	0	57	0	45	0	32	0	20	0	6	0	7	0	20	0

ADDE | SVBTRAHE

Horæ 10. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima.
Horæ 6. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

Ho-

ADDE

Horæ 5 Aſcenſionis rectæ Medij Cœli pro Domo Duodecima.
Horæ 1. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	50	1	12	1	32	1	55	2	17	2	39	3	2	3	27	3	51	60
2	0	50	1	11	1	31	1	54	2	16	2	38	3	1	3	25	3	49	58
4	0	49	1	10	1	30	1	52	2	14	2	36	2	59	3	22	3	46	56
6	0	49	1	9	1	29	1	51	2	13	2	34	2	57	3	20	3	44	54
8	0	48	1	8	1	28	1	50	2	11	2	32	2	55	3	18	3	41	52
10	0	48	1	8	1	27	1	49	2	10	2	31	2	53	3	16	3	39	50
12	0	47	1	7	1	26	1	47	2	8	2	29	2	51	3	13	3	36	48
14	0	47	1	7	1	25	1	46	2	7	2	27	2	49	3	11	3	34	46
16	0	46	1	6	1	24	1	45	2	5	2	25	2	47	3	8	3	31	44
18	0	46	1	6	1	23	1	44	2	4	2	24	2	45	3	6	3	29	42
20	0	45	1	5	1	22	1	42	2	2	2	22	2	43	3	4	3	26	40
22	0	45	1	4	1	21	1	41	2	1	2	21	2	41	3	2	3	24	38
24	0	44	1	3	1	20	1	40	1	59	2	19	2	39	2	59	3	21	36
26	0	44	1	2	1	19	1	39	1	58	2	17	2	37	2	57	3	19	34
28	0	43	1	0	1	18	1	37	1	56	2	15	2	35	2	55	3	16	32
30	0	42	1	1	1	17	1	36	1	55	2	14	2	33	2	52	3	14	30
32	0	41	0	59	1	16	1	35	1	53	2	12	2	31	2	50	3	12	28
34	0	41	0	58	1	15	1	34	2	52	2	10	2	29	2	48	3	9	26
36	0	40	0	57	1	14	1	32	1	50	2	8	2	27	2	46	3	6	24
38	0	40	0	57	1	13	1	31	1	49	2	7	2	25	2	44	3	4	22
40	0	39	0	56	1	12	1	30	1	47	2	5	2	23	2	41	3	1	20
42	0	39	0	55	1	11	1	29	1	45	2	4	2	21	2	39	2	59	18
44	0	38	0	54	1	10	1	27	1	44	2	2	2	19	2	37	2	56	16
46	0	38	0	53	1	9	1	26	1	43	2	0	2	17	2	35	2	54	14
48	0	37	0	52	1	8	1	25	1	41	1	58	2	15	2	32	2	51	12
50	0	37	0	52	1	7	1	24	1	40	1	57	2	13	2	30	2	49	10
52	0	36	0	51	1	6	1	22	1	38	1	55	2	11	2	28	2	46	8
54	0	36	0	50	1	5	1	21	1	37	1	54	2	9	2	26	2	44	6
56	0	35	0	49	1	4	1	20	1	35	1	52	2	7	2	23	2	41	4
58	0	35	0	49	1	3	1	19	1	34	1	50	2	5	2	21	2	39	2
60	0	34	0	48	1	2	1	17	1	32	1	48	2	3	2	19	2	36	0

SVBTRAHE

Horæ 10. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima.
Horæ 6. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

Ho-

	SVBTRAHE																ADDE		
Poli	38		39		40		41		42		43		44		45		46		Poli
Horæ 6. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima. Horæ 2. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	1	24	1	9	0	57	0	45	0	32	0	20	0	6	0	7	0	20	60
2	1	23	1	8	0	57	0	45	0	32	0	20	0	6	0	7	0	20	58
4	1	22	1	7	0	56	0	44	0	31	0	19	0	6	0	7	0	19	56
6	1	20	1	6	0	55	0	44	0	31	0	19	0	6	0	7	0	19	54
8	1	19	1	5	0	54	0	42	0	30	0	19	0	6	0	6	0	18	52
10	1	18	1	4	0	53	0	42	0	30	0	19	0	6	0	6	0	18	50
12	1	16	1	3	0	52	0	41	0	29	0	18	0	6	0	6	0	18	48
14	1	15	1	2	0	52	0	40	0	29	0	18	0	6	0	6	0	17	46
16	1	14	1	1	0	51	0	39	0	28	0	18	0	5	0	6	0	17	44
18	1	13	1	0	0	50	0	39	0	28	0	18	0	5	0	6	0	17	42
20	1	11	0	59	0	49	0	38	0	27	1	17	0	5	0	6	0	16	40
22	1	10	0	58	0	48	0	37	0	27	1	17	0	5	0	6	0	16	38
24	1	8	0	57	0	47	0	36	0	26	0	17	0	5	0	5	0	16	36
26	1	7	0	56	0	46	0	36	0	26	0	17	0	5	0	5	0	15	34
28	1	5	0	55	0	45	0	35	0	25	0	16	0	5	0	5	0	15	32
30	1	4	0	54	0	44	0	35	0	25	0	16	0	5	0	5	0	15	30
32	1	2	0	53	0	43	0	33	0	24	0	16	0	5	0	5	0	14	28
34	1	1	0	52	0	42	0	33	0	24	0	16	0	5	0	5	0	14	26
36	1	0	0	50	0	41	0	32	0	23	0	15	0	4	0	5	0	14	24
38	0	59	0	49	0	40	0	31	0	23	0	15	0	4	0	5	0	14	22
40	0	57	0	48	0	39	0	30	0	22	0	15	0	4	0	5	0	13	20
42	0	56	0	47	0	38	0	30	0	22	0	14	0	4	0	5	0	13	18
44	0	54	0	46	0	37	0	29	0	21	0	14	0	4	0	4	0	13	16
46	0	53	0	45	0	36	0	28	0	21	0	14	0	4	0	4	0	12	14
48	0	51	0	43	0	35	0	27	0	20	0	13	0	4	0	4	0	12	12
50	0	50	0	46	0	34	0	27	0	20	0	13	0	4	0	4	0	12	10
52	0	49	0	41	0	33	0	26	0	19	0	12	0	4	0	4	0	11	8
54	0	48	0	40	0	32	0	25	0	19	0	12	0	4	0	4	0	11	6
56	0	46	0	38	0	31	0	24	0	18	0	12	0	4	0	4	0	11	4
58	0	45	0	37	0	30	0	24	0	17	0	11	0	4	0	4	0	11	2
60	0	43	0	36	0	29	0	23	0	16	0	11	0	4	0	4	0	10	0
	ADDE																SVBTRAHE		

Horæ 9. Aſcenſionis rectæ Medij Cęli pro Domo Duodecima.
Horæ 5. Aſcenſionis rectæ Medij Cęli pro Domo Secunda.

Ho-

ADDE

Horæ 6. Aſcenſionis rectæ medij Cęli pro Domo Duodecima.
Horæ 2. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Poli	47	48	49	50	51	52	53	54	55	Poli
M	G. M.	G. M.	G, M.	G. M.	G. M.	G. M.	G, M.	G. M.	G. M.	M
0	0 34	0 48	1 2	1 17	1 32	1 48	2 3	2 19	2 36	60
2	0 34	0 47	1 1	1 16	1 31	1 46	2 1	2 17	2 34	58
4	0 33	0 46	1 0	1 15	1 29	1 44	1 59	2 14	2 31	56
6	0 33	0 46	0 59	1 14	1 28	1 43	1 57	2 12	2 29	54
8	0 32	0 45	0 58	1 12	1 26	1 41	1 55	2 10	2 26	52
10	0 32	0 44	0 57	1 11	1 25	1 39	1 53	2 8	2 24	50
12	0 31	0 43	0 56	1 10	1 23	1 37	1 51	2 5	2 21	48
14	0 31	0 42	0 55	1 9	1 22	1 36	1 49	2 3	2 19	46
16	0 30	0 41	0 54	1 7	1 20	1 34	1 47	2 1	2 16	44
18	0 30	0 41	0 53	1 6	1 19	1 32	1 45	1 59	2 14	42
20	0 29	0 40	0 52	1 5	1 17	1 30	1 43	1 56	2 11	40
22	0 29	0 39	0 51	1 4	1 16	1 28	1 41	1 54	2 9	38
24	0 28	0 38	0 50	1 2	1 14	1 26	1 39	1 52	2 6	36
26	0 28	0 37	0 49	1 1	1 13	1 24	1 37	1 50	2 3	34
28	0 27	0 36	0 48	1 0	1 11	1 22	1 35	1 47	2 0	32
30	0 26	0 35	0 47	0 59	1 10	1 21	1 33	1 45	1 58	30
32	0 25	0 34	0 46	0 57	1 8	1 19	1 31	1 42	1 55	28
34	0 25	0 34	0 45	0 56	1 7	1 17	1 29	1 40	1 53	26
36	0 24	0 33	0 44	0 55	1 5	1 15	1 27	1 38	1 50	24
38	0 24	0 32	0 43	0 54	1 4	1 14	1 25	1 36	1 48	22
40	0 23	0 31	0 42	0 52	1 2	1 12	1 23	1 33	1 45	20
42	0 23	0 31	0 41	0 51	1 1	1 10	1 21	1 31	1 43	18
44	0 22	0 30	0 40	0 50	0 59	1 8	1 19	1 29	1 40	16
46	0 22	0 29	0 39	0 49	0 58	1 7	1 17	1 27	1 38	14
48	0 21	0 28	0 38	0 47	0 56	1 5	1 15	1 25	1 35	12
50	0 21	0 28	0 37	0 46	0 55	1 3	1 13	1 23	1 32	10
52	0 20	0 27	0 36	0 44	0 53	1 1	1 11	1 20	1 29	8
54	0 20	0 26	0 35	0 43	0 52	1 0	1 9	1 18	1 27	6
56	0 19	0 25	0 34	0 42	0 50	0 58	1 7	1 16	1 24	4
58	0 19	0 25	0 33	0 41	0 49	0 56	1 5	1 14	1 22	2
60	0 18	0 24	0 32	0 39	0 47	0 54	1 3	1 11	1 19	0

SVBTRAHE

Horæ 9. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.
Horæ 5. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

	SVBTRAHE								ADDE	
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 7. Aſcenſionis rectæ medij Cęli pro Domo Duodecima. Horæ 3. Aſcenſionis rectæ medij Cęli pro Domo Secunda.										
M	G. M.	G. M.	G. M.	G. M.	G. M	G. M.	G. M.	G. M.	G. M.	M
0	0 43	0 36	0 29	0 23	0 16	0 11	0 4	0 4	0 10	60
2	0 42	0 35	0 28	0 22	0 16	0 11	0 4	0 4	0 10	58
4	0 40	0 34	0 27	0 21	0 15	0 10	0 3	0 3	0 10	56
6	0 39	0 33	0 27	0 21	0 15	0 10	0 3	0 3	0 9	54
8	0 37	0 31	0 26	0 20	0 14	0 10	0 3	0 3	0 9	52
10	0 36	0 30	0 25	0 19	0 14	0 9	0 3	0 3	0 9	50
12	0 35	0 29	0 24	0 18	0 13	0 9	0 3	0 3	0 8	48
14	0 34	0 28	0 23	0 18	0 13	0 9	0 3	0 3	0 8	46
16	0 32	0 27	0 22	0 17	0 12	0 8	0 3	0 3	0 8	44
18	0 31	0 26	0 21	0 16	0 12	0 8	0 3	0 3	0 7	42
20	0 29	0 24	0 20	0 15	0 11	0 8	0 3	0 3	0 7	40
22	0 28	0 23	0 19	0 15	0 11	0 7	0 3	0 3	0 7	38
24	0 26	0 22	0 18	0 14	0 10	0 7	0 3	0 2	0 6	36
26	0 25	0 21	0 17	0 13	0 10	0 7	0 3	0 2	0 6	34
28	0 23	0 20	0 16	0 12	0 9	0 6	0 [illegible]	0 2	0 6	32
30	0 22	0 19	0 15	0 12	0 9	0 6	0 2	0 2	0 5	30
32	0 20	0 18	0 14	0 11	0 8	0 5	0 2	0 2	0 5	28
34	0 19	0 17	0 13	0 10	0 8	0 5	0 2	0 2	0 5	26
36	0 17	0 15	0 12	0 9	0 7	0 4	0 2	0 2	0 4	24
38	0 16	0 14	0 11	0 9	0 7	0 4	0 2	0 2	0 4	22
40	0 15	0 13	0 10	0 8	0 6	0 4	0 2	0 1	0 4	20
42	0 14	0 12	0 9	0 7	0 6	0 4	0 2	0 1	0 4	18
44	0 12	0 11	0 8	0 6	0 5	0 3	0 1	0 1	0 3	16
46	0 11	0 10	0 7	0 6	0 5	0 3	0 1	0 1	0 3	14
48	0 8	0 8	0 6	0 5	0 4	0 3	0 1	0 1	0 3	12
50	0 7	0 7	0 5	0 4	0 3	0 2	0 1	0 1	0 3	10
52	0 6	0 6	0 4	0 3	0 2	0 2	0 1	0 0	0 2	8
54	0 5	0 5	0 3	0 3	0 2	0 1	0 1	0 0	0 2	6
56	0 3	0 2	0 2	0 2	0 1	0 1	0 0	0 0	0 1	4
58	0 2	0 3	0 1	0 1	0 0	0 0	0 0	0 0	0 0	2
60	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
	ADDE							SVBTRAHE		
Horæ 8. Aſcenſionis rectæ medij Cœli pro Domo Duodecima. Horæ 4. Aſcenſionis rectæ medij Cœli pro Domo Secunda.										

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Horæ 7. Aſcenſionis rectæ medij Cęli pro Domo Duodecima
Horæ 3. Aſcenſionis rectæ medij Cęli pro Domo Secunda.

Poli	47	48	49	50	51	52	53	54	55	Poli
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 18	0 22	0 32	0 39	0 47	0 54	0 3	1 11	1 19	60
2	0 17	0 22	0 31	0 38	0 46	0 53	0 1	1 9	1 17	58
4	0 16	0 21	0 30	0 37	0 44	0 51	0 59	1 6	1 14	56
6	0 16	0 20	0 29	0 36	0 42	0 49	0 57	1 4	1 11	54
8	0 15	0 19	0 28	0 34	0 40	0 47	0 54	1 2	1 8	52
10	0 15	0 19	0 27	0 33	0 39	0 46	0 52	1 0	1 6	50
12	0 14	0 18	0 26	0 32	0 37	0 44	0 50	0 57	1 3	48
14	0 14	0 18	0 25	0 31	0 36	0 42	0 48	0 55	1 1	46
16	0 13	0 17	0 24	0 29	0 34	0 40	0 46	0 52	0 58	44
18	0 13	0 16	0 23	0 28	0 33	0 39	0 44	0 50	0 55	42
20	0 12	0 15	0 22	0 26	0 31	0 37	0 42	0 48	0 52	40
22	0 12	0 15	0 21	0 25	0 30	0 35	0 40	0 46	0 50	38
24	0 11	0 14	0 19	0 24	0 28	0 33	0 38	0 43	0 47	36
26	0 11	0 14	0 18	0 23	0 27	0 32	0 36	0 41	0 45	34
28	0 10	0 13	0 17	0 21	0 25	0 30	0 33	0 38	0 42	32
30	0 10	0 12	0 16	0 20	0 24	0 28	0 31	0 36	0 39	30
32	0 9	0 11	0 15	0 18	0 22	0 26	0 29	0 33	0 36	28
34	0 8	0 11	0 14	0 17	0 20	0 24	0 27	0 31	0 34	26
36	0 7	0 10	0 13	0 16	0 18	0 22	0 25	0 29	0 31	24
38	0 7	0 9	0 12	0 15	0 17	0 21	0 23	0 27	0 29	22
40	0 6	0 8	0 11	0 13	0 15	0 19	0 21	0 24	0 26	20
42	0 6	0 8	0 10	0 12	0 14	0 17	0 19	0 22	0 23	18
44	0 5	0 7	0 9	0 10	0 12	0 15	0 17	0 19	0 20	16
46	0 5	0 6	0 8	0 9	0 11	0 13	0 15	0 17	0 18	14
48	0 4	0 5	0 7	0 7	0 9	0 11	0 13	0 15	0 15	12
50	0 4	0 5	0 6	0 6	0 8	0 9	0 11	0 13	0 13	10
52	0 3	0 4	0 5	0 5	0 6	0 7	0 9	0 10	0 10	8
54	0 3	0 3	0 4	0 4	0 5	0 6	0 7	0 8	0 8	6
56	0 2	0 2	0 2	0 2	0 3	0 4	0 5	0 5	0 5	4
58	0 1	0 1	0 1	0 1	0 2	0 2	0 2	0 3	0 3	2
60	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0

S V B T R A H E

Horæ 8. Aſcenſionis rectæ medij Cœli pro Domo Duodecima.
Horæ 4. Aſcenſionis rectæ medij Cęli pro Domo Secunda.



TABVLAE
ÆQVATIONVM
HOROSCOPI,

Vbi Cęleſtis Figura erigenda eſt ad Altitudinem Poli gr. 38. ſiuè 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 18. Aſcenſionis rectæ Medij Cœli.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	60
2	0 8	0 7	0 6	0 5	0 3	0 2	0 1	0 1	0 3	58
4	0 15	0 13	0 12	0 9	0 6	0 4	0 2	0 1	0 5	56
6	0 23	0 20	0 18	0 14	0 10	0 7	0 3	0 2	0 8	54
8	0 31	0 26	0 23	0 18	0 13	0 9	0 4	0 3	0 11	52
10	0 39	0 33	0 29	0 23	0 16	0 11	0 5	0 4	0 13	50
12	0 46	0 40	0 34	0 27	0 19	0 13	0 5	0 4	0 15	48
14	0 54	0 47	0 40	0 32	0 23	0 15	0 6	0 5	0 18	46
16	1 1	0 53	0 45	0 36	0 26	0 17	0 6	0 6	0 20	44
18	1 8	1 0	0 51	0 41	0 30	0 19	0 7	0 7	0 23	42
20	1 15	1 6	0 56	0 45	0 33	0 21	0 7	0 7	0 25	40
22	1 22	1 13	1 2	0 50	0 37	0 23	0 8	0 8	0 27	38
24	1 29	1 19	1 7	0 54	0 40	0 24	0 8	0 9	0 29	36
26	1 37	1 25	1 12	0 59	0 43	0 26	0 9	0 10	0 31	34
28	1 44	1 31	1 17	1 3	0 46	0 27	0 10	0 10	0 33	32
30	1 51	1 37	1 22	1 7	0 49	0 29	0 11	0 11	0 36	30
32	1 58	1 43	1 27	1 11	0 52	0 31	0 11	0 11	0 38	28
34	2 5	1 49	1 32	1 16	0 55	0 33	0 12	0 12	0 40	26
36	2 12	1 55	1 37	1 20	0 58	0 35	0 13	0 13	0 42	24
38	2 19	2 1	1 42	1 24	1 1	0 37	0 14	0 14	0 45	22
40	2 25	2 6	1 47	1 28	1 3	0 38	0 14	0 14	0 47	20
42	2 31	2 12	1 52	1 32	1 6	0 40	0 14	0 15	0 49	18
44	2 37	2 17	1 56	1 35	1 8	0 41	0 14	0 16	0 51	16
46	2 43	2 22	2 1	1 38	1 11	0 43	0 15	0 17	0 53	14
48	2 49	2 27	2 5	1 41	1 13	0 45	0 15	0 17	0 55	12
50	2 55	2 32	2 9	1 44	1 16	0 47	0 15	0 18	0 57	10
52	3 0	2 37	2 13	1 46	1 18	0 48	0 16	0 19	0 58	8
54	3 5	2 42	2 17	1 49	1 21	0 50	0 16	0 20	1 0	6
56	3 10	2 47	2 21	1 52	1 23	0 51	0 16	0 20	1 2	4
58	3 15	2 52	2 25	1 55	1 26	0 53	0 17	0 21	1 4	2
60	3 20	2 56	2 29	1 58	1 28	0 54	0 17	0 21	1 6	0
	ADDE							SVBTRAHE		
Horæ 17. Aſcenſionis rectæ Medij Cœli.										

Ho-

ADDE

Horæ 18. Aſcenſionis rectæ Medij Cœli.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
2	0	5	0	7	0	9	0	12	0	14	0	18	0	21	0	25	0	31	58
4	0	9	0	13	0	17	0	23	0	28	0	35	0	42	0	49	1	2	56
6	0	15	0	19	0	26	0	34	0	43	0	52	1	3	1	14	1	31	54
8	0	17	0	25	0	34	0	44	0	57	1	9	1	22	1	38	2	0	52
10	0	21	0	31	0	43	0	55	1	11	1	26	1	44	2	3	2	29	50
12	0	25	0	37	0	51	1	6	1	24	1	42	2	4	2	27	2	57	48
14	0	29	0	43	0	59	1	17	1	37	1	58	2	24	2	51	3	25	46
16	0	33	0	49	1	7	1	27	1	49	2	14	2	43	3	14	3	53	44
18	0	37	0	55	1	15	1	37	2	2	2	30	3	2	3	37	4	20	42
20	0	41	1	1	1	23	1	47	2	15	2	45	3	21	4	0	4	47	40
22	0	45	1	7	1	31	1	58	2	27	3	0	3	39	4	23	5	13	38
24	0	49	1	12	1	39	2	8	2	39	3	15	3	57	4	45	5	38	36
26	0	53	1	18	1	47	2	18	2	51	3	30	4	15	5	7	6	4	34
28	0	57	1	24	1	54	2	27	3	3	3	45	4	33	5	28	6	29	32
30	0	1	1	30	2	2	2	37	3	15	4	0	4	51	5	48	6	53	30
32	1	5	1	36	2	9	2	47	3	26	4	14	5	8	6	8	7	17	28
34	1	9	1	42	2	16	2	56	3	38	4	27	5	25	6	27	7	40	26
36	1	12	1	47	2	23	3	5	3	49	4	40	5	41	6	46	8	2	24
38	1	16	1	52	2	30	3	13	4	0	4	53	5	56	7	5	8	23	22
40	1	20	1	57	2	37	3	21	4	11	5	6	6	11	7	23	8	44	20
42	1	24	2	2	2	44	3	29	4	22	5	19	6	26	7	41	9	5	18
44	1	27	2	7	2	50	3	37	4	32	5	31	6	40	7	59	9	25	16
46	1	31	2	12	2	56	3	45	4	42	5	43	6	55	8	16	9	45	14
48	1	34	2	16	3	2	3	53	4	52	5	55	7	9	8	32	10	5	12
50	1	37	2	21	3	8	4	1	5	2	6	7	7	23	8	47	10	24	10
52	1	40	2	25	3	14	4	9	5	11	6	19	7	37	9	2	10	42	8
54	1	43	2	30	3	20	4	17	5	21	6	30	7	50	9	17	10	58	6
56	1	46	2	34	3	26	4	25	5	30	6	41	8	3	9	31	11	14	4
58	1	49	2	38	3	32	4	32	5	38	6	51	8	15	9	44	11	28	2
60	1	51	2	42	3	37	4	39	5	46	7	1	8	26	9	56	11	42	0

SVBTRAHE

Horæ 17. Aſcenſionis rectæ Medij Cœli.

Ho-

	SVBTRAHE														ADDE				
Poli	38		39		40		41		42		43		44		45		46		Poli
Horæ 19. Aſcenſionis rectæ Medij Cœli.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	3	20	2	56	2	29	1	58	1	28	0	54	0	17	0	21	1	6	60
2	3	26	3	1	2	33	2	1	1	31	0	56	0	18	0	22	1	8	58
4	3	31	3	5	2	37	2	4	1	33	0	57	0	18	0	23	1	9	56
6	3	37	3	10	2	41	2	7	1	35	0	59	0	19	0	24	1	11	54
8	3	42	3	14	2	44	2	10	1	37	1	0	0	19	0	24	1	12	52
10	3	47	3	18	2	47	2	13	1	39	1	1	0	19	0	25	1	14	50
12	3	52	3	22	2	50	2	16	1	40	1	2	0	20	0	25	1	15	48
14	3	57	3	26	2	54	2	19	1	42	1	3	0	20	0	26	1	16	46
16	4	1	3	30	2	57	2	22	1	44	1	4	0	20	0	26	1	17	44
18	4	5	3	34	3	0	2	24	1	46	1	5	0	21	0	26	1	18	42
20	4	9	3	37	3	3	2	26	1	47	1	6	0	21	0	27	1	19	40
22	4	13	3	41	3	6	2	28	1	49	1	7	0	21	0	27	1	20	38
24	4	16	3	44	3	8	2	30	1	50	1	7	0	21	0	27	1	21	36
26	4	20	3	47	3	11	2	32	1	51	1	8	0	22	0	28	1	22	34
28	4	24	3	50	3	13	2	33	1	52	1	8	0	22	0	28	1	23	32
30	4	28	3	53	3	16	2	35	1	54	1	9	0	22	0	28	1	24	30
32	4	31	3	56	3	19	2	37	1	55	1	10	0	22	0	28	1	25	28
34	4	35	3	59	3	22	2	39	1	56	1	11	0	23	0	28	1	26	26
36	4	38	4	2	3	24	2	41	1	57	1	12	0	23	0	28	1	27	24
38	4	41	4	5	3	26	2	43	1	59	1	13	0	23	0	28	1	28	22
40	4	44	4	7	3	28	2	44	2	0	1	13	0	23	0	29	1	29	20
42	4	47	4	10	3	30	2	46	2	1	1	14	0	24	0	29	1	30	18
4	4	50	4	12	3	32	2	47	2	2	1	14	0	24	0	29	1	31	16
46	4	53	4	14	3	34	2	49	2	3	1	15	0	24	0	29	1	32	14
48	4	55	4	16	3	35	2	50	2	4	1	15	0	24	0	29	1	32	12
50	4	57	4	18	3	36	2	52	2	5	1	16	0	25	0	29	1	33	10
52	4	59	4	19	3	37	2	53	2	6	1	17	0	25	0	29	1	33	8
54	5	1	4	21	3	39	2	54	2	7	1	18	0	25	0	30	1	33	6
56	5	3	4	22	3	40	2	55	2	8	1	18	0	25	0	30	1	33	4
58	5	5	4	24	3	42	2	57	2	9	1	19	0	26	0	30	1	34	2
60	5	7	4	25	3	43	2	58	2	10	1	20	0	26	0	30	1	34	0
	ADDE														SVBTRAHE				
Horæ 16. Aſcenſionis rectæ Medij Cęli.																			

Ho-

ADDE																				
Poli	47		48		49		50		51		52		53		54		55		Poli	
Horæ 19 Aſcenſionis rectæ Medij Cœli.																				
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M	
0	1	51	2	42	3	37	4	39	5	46	7	1	8	26	9	56	11	42	60	
2	1	53	2	46	3	42	4	45	5	53	7	9	8	35	10	8	11	55	58	
4	1	55	2	49	3	46	4	51	6	0	7	17	8	44	10	19	12	7	56	
6	1	58	2	53	3	51	4	56	6	7	7	25	8	53	10	30	12	19	54	
8	2	0	2	56	3	55	5	1	6	14	7	32	9	2	10	41	12	31	52	
10	2	3	3	0	4	0	5	6	6	20	7	39	9	11	10	51	12	42	50	
12	2	5	3	3	4	4	5	11	6	26	7	46	9	19	11	1	12	53	48	
14	2	7	3	6	4	8	5	16	6	32	7	54	9	27	11	9	13	3	46	
16	2	9	3	9	4	12	5	21	6	37	8	1	9	35	11	17	13	12	44	
18	2	11	3	12	4	16	5	26	6	43	8	8	9	42	11	25	13	21	42	
20	2	13	3	14	4	19	5	31	6	48	8	15	9	48	11	33	13	29	40	
22	2	16	3	17	4	23	5	36	6	53	8	22	9	55	11	40	13	37	38	
24	2	18	3	20	4	26	5	40	6	58	8	28	10	1	11	47	13	45	36	
26	2	20	3	23	4	30	5	45	7	3	8	33	10	7	11	54	13	53	34	
28	2	22	3	26	4	33	5	49	7	7	8	38	10	12	12	0	14	0	32	
30	2	24	3	28	4	36	5	53	7	11	8	42	10	17	12	6	14	6	30	
32	2	25	3	30	4	38	5	57	7	14	8	46	10	22	12	12	14	11	28	
34	2	27	3	32	4	40	6	0	7	18	8	50	10	27	12	17	14	15	26	
36	2	28	3	34	4	42	6	2	7	21	8	54	10	31	12	21	14	19	24	
38	2	29	3	36	4	44	6	4	7	24	8	57	10	35	12	25	14	23	22	
40	2	30	3	37	4	46	6	6	7	27	9	0	10	38	12	28	14	26	20	
42	2	31	3	39	4	48	6	8	7	30	9	3	10	42	12	31	14	29	18	
44	2	32	3	40	4	50	6	10	7	32	9	5	10	45	12	34	14	32	16	
46	2	33	3	41	4	53	6	12	7	35	9	8	10	48	12	37	14	35	14	
48	2	34	3	42	4	55	6	14	7	37	9	10	10	51	12	40	14	38	12	
5[illegible]	2	35	3	43	4	52	6	16	7	39	9	12	10	53	12	42	14	40	10	
52	2	36	3	44	4	59	6	17	7	41	9	14	10	55	12	43	14	41	8	
54	2	37	3	46	5	1	6	19	7	43	9	16	10	57	12	44	14	42	6	
56	2	38	3	47	5	2	6	20	7	45	9	18	10	58	12	45	14	43	4	
58	2	39	3	48	5	3	6	22	7	47	9	19	10	58	12	45	14	43	2	
60	2	39	3	49	5	4	6	23	7	49	9	20	10	59	12	46	14	43	0	
SVBTRAHE																				
Horæ 16. Aſcenſionis rectæ Medij Cęli.																				

Ho-

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
	Horæ 10. Aſcenſionis rectæ Medij Cęli.									
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	5 7	4 25	3 43	2 58	2 10	1 20	0 26	0 30	0 34	60
2	5 9	4 27	3 45	2 59	2 11	1 20	0 26	0 30	0 35	58
4	5 11	4 28	3 46	3 0	2 12	1 20	0 26	0 30	0 35	56
6	5 13	4 30	3 47	3 1	2 13	1 20	0 26	0 30	0 36	54
8	5 14	4 31	3 48	3 1	2 13	1 21	0 26	0 30	0 36	52
10	5 16	4 33	3 49	3 2	2 13	1 21	0 26	0 31	0 36	50
12	5 17	4 34	3 50	3 2	2 13	1 21	0 26	0 31	0 37	48
14	5 18	4 35	3 51	3 3	2 14	1 21	0 26	0 31	0 37	46
16	5 19	4 36	3 51	3 3	2 14	1 21	0 27	0 31	0 37	44
18	5 20	4 37	3 52	3 4	2 14	1 21	0 27	0 31	0 37	42
20	5 21	4 38	3 52	3 4	2 14	1 21	0 27	0 31	0 37	40
22	5 22	4 39	3 53	3 5	2 14	1 22	0 27	0 31	0 38	38
24	5 23	4 39	3 53	3 5	2 15	1 22	0 27	0 31	0 38	36
26	5 24	4 40	3 54	3 6	2 15	1 22	0 27	0 31	0 38	34
28	5 24	4 40	3 54	3 6	2 15	1 22	0 27	0 32	0 38	32
30	5 25	4 41	3 55	3 6	2 15	1 22	0 27	0 32	0 38	30
32	5 26	4 41	3 55	3 6	2 15	1 22	0 27	0 32	0 38	28
34	5 27	4 42	3 55	3 7	2 15	1 22	0 27	0 32	0 38	26
36	5 27	4 42	3 55	3 7	2 16	1 22	0 27	0 32	0 37	24
38	5 27	4 42	3 56	3 7	2 16	1 23	0 27	0 32	0 37	22
40	5 28	4 43	3 56	3 7	2 16	1 23	0 27	0 32	0 37	20
42	5 28	4 43	3 56	3 7	2 16	1 23	0 27	0 32	0 37	18
44	5 28	4 43	3 56	3 7	2 16	1 23	0 27	0 32	0 37	16
46	5 29	4 43	3 57	3 7	2 16	1 23	0 27	0 32	0 37	14
48	5 29	4 44	3 57	3 8	2 16	1 23	0 27	0 32	0 36	12
50	5 29	4 44	3 57	3 8	2 16	1 23	0 27	0 32	0 36	10
52	5 29	4 44	3 57	3 8	2 16	1 23	0 27	0 32	0 36	8
54	5 29	4 44	3 57	3 8	2 16	1 23	0 27	0 32	0 36	6
56	5 29	4 44	3 56	3 8	2 16	1 23	0 27	0 32	0 36	4
58	5 29	4 44	3 56	3 8	2 16	1 22	0 27	0 32	0 35	2
60	5 29	4 44	3 56	3 8	2 16	1 22	0 27	0 32	0 35	0
	ADDE							SVBTRAHE		
	Horæ 15. Aſcenſionis rectæ Medij Cęli.									

Ho-

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 20. Aſcenſionis rectæ medij Cœli.										
M	G. M.	G. M.	M. G	G. M.	G. M.	G. M.	G M.	G. M.	G. M.	M
0	2 39	3 49	5 4	6 23	7 49	9 20	10 59	12 46	14 43	60
2	2 40	3 50	5 5	6 24	7 49	9 21	10 59	12 46	14 42	58
4	2 40	3 50	5 5	6 25	7 50	9 21	10 59	12 46	14 42	56
6	2 41	3 51	5 6	6 26	7 50	9 22	11 0	12 46	14 41	54
8	2 41	3 51	5 7	6 26	7 50	9 22	11 0	12 46	14 41	52
10	2 41	3 52	5 8	6 26	7 51	9 23	11 0	12 45	14 40	50
12	2 42	3 52	5 8	6 27	7 51	9 23	10 59	12 45	14 39	48
14	2 42	3 52	5 8	6 28	7 52	9 24	10 59	12 44	14 38	46
16	2 42	3 53	5 9	6 28	7 52	9 24	10 59	12 44	14 36	44
18	2 42	3 53	5 9	6 28	7 52	9 24	10 58	12 43	14 34	42
20	2 43	3 53	5 9	6 27	7 52	9 23	10 58	12 42	14 32	40
22	2 43	3 53	5 9	6 27	7 51	9 22	10 57	12 41	14 31	38
24	2 43	3 53	5 9	6 27	7 51	9 21	10 57	12 40	14 29	36
26	2 43	3 53	5 9	6 26	7 50	9 20	10 56	12 39	14 27	34
28	2 43	3 53	5 9	6 26	7 50	9 19	10 55	12 37	14 25	32
30	2 43	3 53	5 8	6 25	7 49	9 18	10 54	12 35	14 23	30
32	2 43	3 52	5 8	6 25	7 48	9 17	10 52	12 33	14 20	28
34	2 43	3 52	5 7	6 24	7 47	9 16	10 51	12 31	14 18	26
36	2 43	3 52	5 7	6 24	7 47	9 15	10 49	12 29	14 15	24
38	2 43	3 52	5 6	6 23	7 46	9 14	10 48	12 27	14 13	22
40	2 43	3 52	5 6	6 23	7 46	9 13	10 46	12 25	14 10	20
42	2 43	3 51	5 5	6 22	7 45	9 12	10 45	12 23	14 7	18
44	2 43	3 51	5 5	6 22	7 45	9 10	10 43	12 20	14 4	16
46	2 43	3 51	5 4	6 21	7 44	9 9	10 41	12 18	14 1	14
48	2 42	3 51	5 3	6 21	7 42	9 7	10 39	12 15	13 57	12
50	2 42	3 51	5 2	6 20	7 41	9 6	10 37	12 13	13 54	10
52	2 42	3 51	5 2	6 19	7 39	9 4	10 35	12 11	13 51	8
54	2 41	3 50	5 1	6 18	7 38	9 3	10 33	12 9	13 48	6
56	2 41	3 50	5 1	6 17	7 36	9 1	10 31	12 6	13 44	4
58	2 40	3 49	5 0	6 16	7 35	9 0	10 29	12 4	13 41	2
60	2 40	3 49	5 0	6 15	7 34	8 58	10 26	12 1	13 38	0

SVBTRAHE

Horæ 15. Aſcenſionis rectæ Medij Cœli.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 21. Aſcenſionis rectæ Medij Cęli.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	5 28	4 44	3 56	3 8	2 16	1 22	0 27	0 32	1 35	60
2	5 28	4 44	3 56	3 8	2 16	1 22	0 27	0 32	1 35	58
4	5 28	4 44	3 56	3 8	2 16	1 22	0 27	0 32	1 34	56
6	5 28	4 43	3 56	3 8	2 16	1 22	0 27	0 32	1 34	54
8	5 28	4 43	3 56	3 7	2 16	1 22	0 27	0 32	1 34	52
10	5 27	4 43	3 55	3 7	2 16	1 21	0 27	0 32	1 34	50
12	5 27	4 43	3 55	3 7	2 16	1 21	0 26	0 32	1 33	48
14	5 26	4 42	3 55	3 6	2 15	1 21	0 26	0 32	1 33	46
16	5 26	4 42	3 55	3 6	2 15	1 21	0 26	0 32	1 33	44
18	5 25	4 41	3 54	3 5	2 15	1 21	0 26	0 32	1 33	42
20	5 25	4 41	3 54	3 5	2 15	1 21	0 26	0 32	1 32	40
22	5 24	4 40	3 53	3 4	2 14	1 20	0 26	0 32	1 32	38
24	5 24	4 40	3 52	3 4	2 14	1 20	0 26	0 32	1 32	36
26	5 23	4 39	3 51	3 3	2 13	1 20	0 26	0 32	1 32	34
28	5 22	4 39	3 51	3 3	2 13	1 20	0 26	0 32	1 32	32
30	5 21	4 38	3 50	3 3	2 12	1 19	0 26	0 32	1 31	30
32	5 21	4 37	3 50	3 2	2 12	1 19	0 25	0 32	1 31	28
34	5 20	4 36	3 49	3 2	2 11	1 19	0 25	0 32	1 30	26
36	5 20	4 36	3 49	3 2	2 11	1 19	0 25	0 32	1 30	24
38	5 19	4 35	3 48	3 1	2 10	1 18	0 25	0 31	1 29	22
40	5 19	4 35	3 48	3 1	2 10	1 18	0 25	0 31	1 29	20
42	5 18	4 34	3 47	3 0	2 9	1 18	0 25	0 31	1 28	18
44	5 18	4 34	3 47	3 0	2 9	1 18	0 25	0 31	1 28	16
46	5 17	4 33	3 46	2 59	2 9	1 18	0 25	0 31	1 28	14
48	5 17	4 33	3 46	2 59	2 9	1 17	0 25	0 31	1 28	12
50	5 16	4 32	3 45	2 58	2 8	1 17	0 24	0 31	1 28	10
52	5 15	4 31	3 45	2 58	2 8	1 17	0 24	0 31	1 27	8
54	5 14	4 30	3 44	2 57	2 7	1 17	0 24	0 30	1 27	6
56	5 13	4 29	3 43	2 56	2 7	1 17	0 24	0 30	1 27	4
58	5 12	4 28	3 42	2 55	2 6	1 16	0 24	0 30	1 26	2
60	5 11	4 27	3 41	2 55	2 6	1 16	0 24	0 30	1 26	0
	ADDE							SVBTRAHE		
Horæ 14. Aſcenſionis rectæ Medij Cęli.										

Ho-

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 21. Aſcenſionis rectæ medij Cęli.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	2 40	3 49	5 0	6 15	7 34	8 58	10 26	12 1	13 38	60
2	2 39	3 48	4 59	6 14	7 33	8 56	10 24	11 58	13 35	58
4	2 39	3 47	4 58	6 13	7 31	8 54	10 21	11 55	13 31	56
6	2 39	3 46	4 57	6 11	7 30	8 52	10 19	11 52	13 27	54
8	2 38	3 46	4 57	6 9	7 28	8 50	10 16	11 49	13 23	52
10	2 38	3 45	4 56	6 8	7 27	8 48	10 14	11 46	13 20	50
12	2 38	3 44	4 55	6 7	7 25	8 46	10 11	11 42	13 16	48
14	2 37	3 43	4 54	6 6	7 24	8 44	10 9	11 39	13 13	46
16	2 37	3 43	4 53	6 4	7 22	8 42	10 7	11 36	13 9	44
18	2 36	3 42	4 52	6 3	7 21	8 40	10 5	11 33	13 6	42
20	2 36	3 42	4 51	6 2	7 19	8 38	10 2	11 30	13 2	40
22	2 35	3 41	4 50	6 1	7 18	8 36	10 0	11 27	12 9	38
24	2 35	3 41	4 49	5 59	7 16	8 34	9 57	11 24	12 55	36
26	2 34	3 40	4 48	5 58	7 15	8 32	9 55	11 21	12 52	34
28	2 34	3 40	4 47	5 57	7 13	8 30	9 52	11 18	12 48	32
30	2 33	3 39	4 46	5 56	7 11	8 28	9 50	11 15	12 45	30
32	2 33	3 39	4 45	5 55	7 9	8 26	9 47	11 2	12 41	28
34	2 32	3 38	4 44	5 54	7 7	8 24	9 44	11 9	12 37	26
36	2 32	3 37	4 43	5 52	7 5	8 21	9 41	11 5	12 32	24
38	2 31	3 36	4 42	5 51	7 3	8 19	9 38	11 2	12 28	22
40	2 31	3 35	4 40	5 49	7 1	8 16	9 35	10 58	12 24	20
42	2 30	3 34	4 39	5 48	6 59	8 14	9 32	10 55	12 20	18
44	2 30	3 33	4 37	5 46	6 57	8 11	9 29	10 51	12 16	16
46	2 29	3 32	4 36	5 45	6 55	8 9	9 26	10 48	12 12	14
48	2 29	3 31	4 35	5 43	6 53	8 6	9 23	10 44	12 8	12
50	2 28	3 30	4 34	5 42	6 51	8 4	9 20	10 41	12 4	10
52	2 28	3 29	4 32	5 40	6 49	8 1	9 17	10 38	12 0	8
54	2 27	3 28	4 31	5 39	6 47	7 59	9 15	10 35	11 56	6
56	2 26	3 28	4 30	5 37	6 45	7 57	9 12	10 32	11 52	4
58	2 26	3 27	4 29	5 36	6 44	7 55	9 10	10 29	11 49	2
60	2 25	3 26	4 28	5 34	6 42	7 53	9 7	10 25	11 45	0

SVBTRAHE

Horæ 14. Aſcenſionis rectæ medij Cęli.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 22. Aſcenſionis rectæ medij Cęli.										
M	G. M.	G. M.	G. M.	G. M.	G. M	G. M.	G. M.	G. M.	G. M.	M
0	5 11	4 27	3 41	2 55	2 6	1 16	0 24	0 30	1 26	60
2	5 10	4 26	3 40	2 54	2 5	1 16	0 24	0 30	1 26	58
4	5 9	4 25	3 40	2 54	2 5	1 16	0 24	0 30	1 26	56
6	5 8	4 24	3 39	2 53	2 4	1 15	0 24	0 30	1 25	54
8	5 7	4 24	3 39	2 53	2 4	1 15	0 24	0 29	1 25	52
10	5 6	4 23	3 38	2 52	2 3	1 15	0 24	0 29	1 24	50
12	5 5	4 22	3 37	2 52	2 3	1 15	0 24	0 29	1 24	48
14	5 4	4 21	3 36	2 51	2 2	1 14	0 24	0 29	1 24	46
16	5 3	4 20	3 36	2 51	2 2	1 14	0 23	0 29	1 23	44
18	5 2	4 19	3 35	2 50	2 1	1 13	0 23	0 29	1 23	42
20	5 1	4 18	3 34	2 49	2 1	1 13	0 23	0 29	1 23	40
22	5 0	4 17	3 33	2 48	2 0	1 12	0 23	0 29	1 22	38
24	4 59	4 16	3 33	2 48	2 0	1 12	0 23	0 29	1 22	36
26	4 58	4 15	3 32	2 47	1 59	1 12	0 23	0 29	1 22	34
28	4 56	4 14	3 31	2 46	1 59	1 11	0 23	0 29	1 21	32
30	4 55	4 13	3 30	2 45	1 58	1 11	0 23	0 29	1 21	30
32	4 54	4 12	3 29	2 45	1 58	1 11	0 22	0 28	1 21	28
34	4 53	4 11	3 28	2 44	1 57	1 11	0 22	0 28	1 20	26
36	4 52	4 11	3 27	2 43	1 57	1 10	0 22	0 28	1 20	24
38	4 51	4 10	3 26	2 42	1 56	1 10	0 22	0 28	1 19	22
40	4 49	4 9	3 25	2 42	1 56	1 10	0 22	0 28	1 19	20
42	4 49	4 8	3 24	2 41	1 55	1 10	0 22	0 28	1 18	18
44	4 48	4 7	3 24	2 41	1 55	1 10	0 22	0 28	1 18	16
46	4 47	4 6	3 23	2 40	1 54	1 9	0 22	0 28	1 18	14
48	4 45	4 6	3 22	2 39	1 54	1 9	0 21	0 28	1 17	12
50	4 44	4 5	3 21	2 38	1 53	1 9	0 21	0 28	1 17	10
52	4 43	4 4	3 20	2 38	1 53	1 9	0 21	0 28	1 17	8
54	4 42	4 3	3 19	2 37	1 52	1 8	0 21	0 27	1 16	6
56	4 41	4 2	3 19	2 37	1 52	1 8	0 21	0 27	1 16	4
58	4 40	4 1	3 18	2 36	1 51	1 8	0 21	0 27	1 15	2
60	4 39	4 0	3 18	2 36	1 51	1 8	0 21	0 27	1 15	0
	ADDE							SVBTRAHE		

Horæ 13. Aſcenſionis rectæ medij Cęli.

Ho-

ADDE

Horæ 22. Aſcenſionis rectæ Medij Cœli.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	25	3	26	4	28	5	34	6	42	7	53	9	7	10	25	11	45	60
2	2	24	3	24	4	27	5	33	6	41	7	51	9	5	10	22	11	41	58
4	2	24	3	24	4	26	5	31	6	39	7	49	9	2	10	19	11	37	56
6	2	23	3	23	4	25	5	30	6	37	7	47	8	59	10	16	11	34	54
8	2	23	3	22	4	24	5	28	6	35	7	44	8	56	10	12	11	30	52
10	2	22	3	21	4	23	5	27	6	33	7	42	8	54	10	9	11	27	50
12	2	21	3	21	4	22	5	25	6	31	7	39	8	51	10	5	11	23	48
14	2	20	3	20	4	21	5	24	6	30	7	37	8	48	10	2	11	20	46
16	2	20	3	19	4	19	5	22	6	28	7	34	8	45	9	58	11	16	44
18	2	19	3	18	4	18	5	21	6	26	7	32	8	43	9	55	11	12	42
20	2	19	3	18	4	17	5	19	6	24	7	30	8	40	9	52	11	8	40
22	2	18	3	17	4	16	5	18	6	22	7	28	8	37	9	49	11	5	38
24	2	18	3	16	4	14	5	16	6	20	7	26	8	34	9	46	11	1	36
26	2	17	3	15	4	13	5	15	6	18	7	24	8	32	9	43	10	58	34
28	2	17	3	14	4	11	5	13	6	16	7	21	8	29	9	40	10	54	32
30	2	16	3	13	4	10	5	12	6	14	7	19	8	27	9	37	10	51	30
32	2	16	3	12	4	9	5	10	6	12	7	17	8	24	9	34	10	47	28
34	2	15	3	11	4	8	5	9	6	11	7	15	8	21	9	31	10	43	26
36	2	14	3	10	4	6	5	7	6	9	7	12	8	18	9	28	10	39	24
38	2	13	3	9	4	5	5	5	6	7	7	10	8	16	9	25	10	36	22
40	2	13	3	8	4	4	5	4	6	5	7	7	8	13	9	21	10	32	20
42	2	12	3	7	4	3	5	2	6	3	7	5	8	10	9	18	10	29	18
44	2	12	3	6	4	1	5	0	6	1	7	2	8	7	9	14	10	25	16
46	2	11	3	5	4	0	4	59	5	59	7	0	8	5	9	11	10	21	14
48	2	10	3	4	3	59	4	57	5	57	6	58	8	2	9	8	10	17	12
50	2	9	3	3	3	58	4	56	5	55	6	56	8	0	9	5	10	14	10
52	2	9	3	2	3	56	4	54	5	53	6	53	7	57	9	2	10	10	8
54	2	8	3	1	3	55	4	52	5	51	6	51	7	54	8	59	10	7	6
56	2	7	3	0	3	54	4	50	5	49	6	48	7	51	8	55	10	3	4
58	2	6	2	59	3	53	4	49	5	47	6	46	7	45	8	52	9	59	2
60	2	5	2	58	3	52	4	47	5	45	6	43	7	45	8	49	9	59	0

SVBTRAHE.

Horæ 1 Aſcenſionis rectæ Medij Cœli.

Ho-

	SVBTRAHE														ADDE				
Poli	38		39		40		41		42		43		44		45		46		Poli
	Horæ 23. Aſcenſionis rectæ medij Cœli.																		
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	4	39	4	0	3	18	2	36	1	51	1	8	0	21	0	27	1	15	60
2	4	38	3	59	3	17	2	35	1	50	1	8	0	21	0	27	1	14	58
4	4	37	3	58	3	16	2	35	1	50	1	7	0	20	0	27	1	14	56
6	4	36	3	57	3	15	2	34	1	49	1	7	0	20	0	26	1	13	54
8	4	35	3	55	3	14	2	33	1	49	1	7	0	20	0	26	1	13	52
10	4	34	3	54	3	13	2	32	1	48	1	7	0	20	0	26	1	12	50
12	4	33	3	53	3	12	2	32	1	48	1	6	0	20	0	26	1	12	48
14	4	32	3	52	3	11	2	31	1	47	1	6	0	20	0	26	1	12	46
16	4	30	3	51	3	10	2	30	1	47	2	6	0	19	0	26	1	11	44
18	4	29	3	50	3	9	2	29	1	46	1	5	0	19	0	26	1	11	42
20	4	27	3	49	3	8	2	29	1	46	1	5	0	19	0	25	1	11	40
22	4	26	3	48	3	7	2	28	1	45	1	5	0	19	0	25	1	11	38
24	4	25	3	47	3	6	2	27	1	45	1	4	0	19	0	25	1	10	36
26	4	24	3	46	3	5	2	26	1	44	1	4	0	19	0	25	1	10	34
28	4	22	3	45	3	4	2	25	1	44	1	4	0	19	0	25	1	10	32
30	4	21	3	44	3	3	2	24	1	43	1	3	0	19	0	25	1	9	30
32	4	20	3	42	3	3	2	24	1	43	1	3	0	19	0	24	1	9	28
34	4	19	3	41	3	2	2	23	1	42	1	3	0	19	0	24	1	8	26
36	4	18	3	40	3	1	2	22	1	42	1	2	0	18	0	24	1	8	24
38	4	17	3	39	3	0	2	21	1	41	1	2	0	18	0	24	1	7	22
40	4	15	3	38	3	0	2	21	1	41	1	2	0	18	0	24	1	7	20
42	4	14	3	37	2	59	2	20	1	40	1	2	0	18	0	24	1	7	18
44	4	13	3	36	2	59	2	20	1	40	1	1	0	18	0	23	1	6	16
46	4	12	3	35	2	58	2	19	1	39	1	1	0	18	0	23	1	6	14
48	4	10	3	34	2	57	2	19	1	39	1	1	0	18	0	23	1	6	12
50	4	9	3	33	2	56	2	18	1	38	1	0	0	18	0	23	1	5	10
52	4	7	3	32	2	55	2	18	1	38	1	0	0	18	0	23	1	5	8
54	4	6	3	31	2	54	2	17	1	38	1	0	0	18	0	23	1	4	6
56	4	5	3	30	2	53	2	17	1	37	0	59	0	18	0	23	1	4	4
58	4	4	3	29	2	52	2	16	1	36	0	59	0	18	0	22	1	3	2
60	4	3	3	28	2	51	2	16	1	36	0	59	0	18	0	22	1	3	0
	ADDE														SVBTRAHE				

Horæ 12. Aſcenſionis rectæ medij Cœli.

Horæ

ADDE

Horæ 23. Aſcenſionis rectæ Medij Cœli.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	5	2	58	3	51	4	47	5	45	6	43	7	45	8	49	9	55	60
2	2	4	2	57	3	50	4	46	5	43	6	41	7	43	8	46	9	52	58
4	2	4	2	56	3	49	4	44	5	41	6	39	7	40	8	43	9	48	56
6	2	3	2	55	3	48	4	43	5	39	6	37	7	38	8	40	9	45	54
8	2	3	2	55	3	46	4	41	5	37	6	35	7	35	8	37	9	41	52
10	2	2	2	54	3	45	4	40	5	35	6	33	7	33	8	34	9	38	50
12	2	2	2	53	3	44	4	38	5	33	6	31	7	30	8	31	9	35	48
14	2	1	2	52	3	41	4	37	5	32	6	29	7	28	8	28	9	32	46
16	2	1	2	52	3	42	4	35	5	30	6	27	7	26	8	26	9	29	44
18	2	0	2	51	3	41	4	34	5	28	6	25	7	23	8	23	9	26	42
20	2	0	2	50	3	40	4	32	5	26	6	22	7	21	8	20	9	23	40
22	1	59	2	49	3	39	4	31	5	25	6	20	7	18	8	17	9	20	38
24	1	59	2	48	3	38	4	29	5	23	6	18	7	16	8	14	9	17	36
26	1	58	2	47	3	37	4	28	5	21	6	16	7	13	8	12	9	14	34
28	2	58	2	46	3	35	4	26	5	19	6	14	7	11	8	9	9	10	32
30	1	57	2	45	3	34	4	25	5	17	6	12	7	8	8	6	9	7	30
32	1	57	2	44	3	33	4	23	5	15	6	10	7	6	8	3	9	3	28
34	1	56	2	43	3	32	4	22	5	14	6	8	7	3	8	0	9	0	26
36	1	55	2	42	3	31	4	20	5	12	6	6	7	1	7	57	8	57	24
38	1	54	2	41	3	30	4	19	5	10	6	4	6	58	7	55	8	54	22
40	1	54	2	40	3	29	4	17	5	8	6	1	6	56	7	52	8	50	20
42	1	53	2	39	3	28	3	16	5	6	5	59	6	53	7	49	8	46	18
44	1	53	2	39	3	26	4	14	5	4	5	57	6	51	7	46	8	43	16
46	1	52	2	38	3	25	4	13	5	3	5	55	6	48	7	44	8	40	14
48	1	52	2	37	3	24	4	11	5	1	5	53	6	46	7	41	8	37	12
50	1	51	2	36	3	23	4	10	5	0	5	51	6	43	7	39	8	33	10
52	1	51	2	35	3	22	4	8	4	58	5	49	6	41	7	36	8	30	8
54	1	50	2	34	3	21	4	7	4	57	5	47	6	38	7	33	8	27	6
56	1	49	2	33	3	20	4	5	4	55	5	45	6	36	7	30	8	24	4
58	1	48	2	32	3	19	4	4	4	53	5	43	6	33	7	27	8	21	2
60	1	48	2	32	3	17	4	2	4	51	5	41	6	31	7	24	8	18	0

SVBTRAHE

Horæ 12. Aſcenſionis rectæ Medij Cœli.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ o. Aſcenſionis rectæ medij Cęli.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	4 3	3 28	2 51	2 16	1 36	0 59	0 18	0 22	1 3	60
2	4 2	3 27	2 50	2 15	1 35	0 59	0 18	0 22	1 3	58
4	4 0	3 26	2 50	2 14	1 35	0 58	0 18	0 22	1 3	56
6	3 59	3 25	2 49	2 13	1 34	0 58	0 18	0 22	1 3	54
8	3 58	3 24	2 48	2 13	1 34	0 58	0 18	0 22	1 2	52
10	3 57	3 23	2 47	2 12	1 33	0 57	0 18	0 22	1 2	50
12	3 56	3 22	2 47	2 12	1 33	0 57	0 17	0 21	1 2	48
14	3 55	3 21	2 46	2 11	1 32	0 57	0 17	0 21	1 1	46
16	3 54	3 20	2 45	2 10	1 32	0 56	0 17	0 21	1 1	44
18	3 53	3 19	2 44	2 9	1 31	0 56	0 17	0 21	1 0	42
20	3 52	3 18	2 44	2 9	1 31	0 56	0 17	0 21	1 0	40
22	3 51	3 17	2 43	2 8	1 30	0 56	0 17	0 20	0 59	38
24	3 50	3 16	2 42	2 8	1 30	0 55	0 17	0 20	0 59	36
26	3 49	3 15	2 41	2 7	1 29	0 55	0 17	0 20	0 58	34
28	3 47	3 14	2 41	2 6	1 29	0 55	0 17	0 20	0 58	32
30	3 46	3 13	2 40	2 5	1 28	0 54	0 17	0 20	0 58	30
32	3 45	3 12	2 39	2 5	1 28	0 54	0 17	0 19	0 57	28
34	3 44	3 11	2 38	2 4	1 27	0 54	0 17	0 19	0 57	26
36	3 42	3 10	2 38	2 3	1 27	0 53	0 17	0 19	0 57	24
38	3 41	3 9	2 37	2 2	1 26	0 53	0 17	0 19	0 56	22
40	3 40	3 8	2 36	2 2	1 26	0 53	0 17	0 19	0 56	20
42	3 39	3 7	2 35	2 1	1 25	0 53	0 17	0 19	0 56	18
44	3 37	3 6	2 34	2 0	1 25	0 52	0 17	0 18	0 55	16
46	3 36	3 5	2 33	1 59	1 24	0 52	0 16	0 18	0 55	14
48	3 35	3 4	2 32	1 59	1 24	0 52	0 16	0 18	0 55	12
50	3 34	3 3	2 31	1 58	1 23	0 51	0 16	0 18	0 54	10
52	3 32	3 2	2 30	1 58	2 23	0 51	0 16	0 18	0 54	8
54	3 31	3 1	2 29	1 57	1 22	0 51	0 16	0 18	0 53	6
56	3 29	3 0	2 28	1 56	1 22	0 50	0 16	0 18	0 53	4
58	3 28	2 59	2 27	1 55	1 21	0 50	0 16	0 18	0 52	2
60	3 27	2 58	2 26	1 55	1 21	0 50	0 16	0 18	0 52	0
	ADDE							SVBTRAHE		
Horæ 11. Aſcenſionis rectæ medij Cœli.										

Ho-

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ADDE

Horæ o. Aſcenſionis rectæ medij Cęli.

Poli	47		48		49		50		51		52		53		54		55		Poli
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	1	48	2	32	3	17	4	2	4	51	5	41	6	31	7	24	8	18	60
2	1	47	2	31	3	16	4	1	4	50	5	39	6	29	7	22	8	15	58
4	1	47	2	30	3	15	4	0	4	48	5	37	6	27	7	19	8	12	56
6	1	46	2	29	3	14	3	59	4	46	5	35	6	25	7	16	8	9	54
8	1	45	2	28	3	13	3	57	4	44	5	32	6	22	7	13	8	6	52
10	1	44	2	27	3	12	3	56	4	42	5	30	6	20	7	11	8	3	50
12	1	44	2	26	3	10	3	54	4	40	5	28	6	17	7	8	8	0	48
14	1	43	2	25	3	9	3	53	4	39	5	26	6	15	7	5	7	57	46
16	1	43	2	24	3	8	3	51	4	37	5	24	6	12	7	2	7	54	44
18	1	42	2	23	3	7	3	50	4	36	5	22	6	10	7	0	7	51	42
20	1	41	2	22	3	6	3	48	4	34	5	20	6	8	6	57	7	48	40
22	1	40	2	21	3	5	3	47	4	33	5	18	6	6	6	54	7	45	38
24	1	40	2	20	3	3	3	45	4	31	5	16	6	3	6	51	7	42	36
26	1	39	2	19	3	2	3	44	4	30	5	14	6	1	6	49	7	39	34
28	1	39	2	18	3	1	3	42	4	28	5	12	5	59	6	46	7	36	32
30	1	38	2	17	3	0	3	41	4	26	5	10	5	57	6	43	7	33	30
32	1	37	2	16	2	58	3	39	4	24	5	8	5	54	6	40	7	30	28
34	1	36	2	15	2	57	3	38	4	23	5	6	5	52	6	38	7	27	26
36	1	36	2	15	2	56	3	37	4	21	5	4	5	50	6	35	7	24	24
38	1	35	2	14	2	55	3	36	4	19	5	2	5	48	6	33	7	21	22
40	1	35	2	13	2	54	3	35	4	17	5	0	5	45	6	30	7	18	20
42	1	34	2	12	2	53	3	34	4	16	4	58	5	43	6	29	7	15	18
44	1	34	2	11	2	52	3	32	4	14	4	56	5	41	6	26	7	12	16
46	1	33	2	10	2	51	3	31	4	13	4	54	5	39	6	24	7	9	14
48	1	32	2	10	2	50	3	29	4	11	4	52	5	36	6	21	7	6	12
50	1	31	2	9	2	49	3	28	4	10	4	50	5	34	6	19	7	3	10
52	1	31	2	8	2	48	3	26	4	8	4	48	5	32	6	15	7	0	8
54	1	30	2	7	2	47	3	25	4	7	4	46	5	30	6	13	6	57	6
56	1	30	2	6	2	46	3	23	4	5	4	44	5	28	6	11	6	54	4
58	1	29	2	5	2	45	3	22	4	3	4	42	5	26	6	8	6	51	2
60	1	28	2	5	2	43	3	20	4	1	4	40	5	23	6	5	6	48	0

SVBTRAHE

Horæ 11. Aſcenſionis rectæ medij Cęli.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 1. Aſcenſionis rectæ medij Cęli.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	4 27	2 58	2 26	1 55	1 21	0 50	0 16	0 18	0 52	60
2	4 26	2 57	2 25	1 51	1 20	0 49	0 16	0 18	0 52	58
4	4 25	2 55	2 24	1 53	1 20	0 49	0 15	0 17	0 52	56
6	3 24	2 54	2 23	1 52	1 19	0 48	0 15	0 17	0 51	54
8	3 22	2 53	2 22	1 52	1 19	0 48	0 15	0 17	0 51	52
10	3 21	2 52	2 21	1 51	1 18	0 47	0 15	0 17	0 51	50
12	3 20	2 51	2 21	1 50	1 18	0 47	0 15	0 17	0 51	48
14	3 19	2 50	2 20	1 49	1 17	0 46	0 15	0 17	0 50	46
16	3 17	2 48	2 19	1 49	1 17	0 46	0 14	0 17	0 50	44
18	3 16	2 47	2 18	1 48	1 16	0 46	0 14	0 17	0 50	42
20	3 14	2 46	2 17	1 47	1 16	0 45	0 14	0 17	0 50	40
22	3 13	2 45	2 16	1 46	1 15	0 45	0 14	0 17	0 49	38
24	3 12	2 44	2 15	1 46	1 15	0 45	0 14	0 17	0 49	36
26	3 11	2 43	2 14	1 45	1 14	0 45	0 14	0 17	0 49	34
28	3 9	2 41	2 13	1 44	1 14	0 44	0 14	0 17	0 49	32
30	3 8	2 40	2 12	1 43	1 13	0 44	0 14	0 17	0 48	30
32	3 6	2 39	2 11	1 43	1 13	0 44	0 13	0 17	0 47	28
34	3 5	2 38	2 10	1 42	1 12	0 44	0 13	0 17	0 47	26
36	3 4	2 37	2 9	1 41	1 12	0 43	0 13	0 16	0 47	24
38	3 3	2 36	2 8	1 40	1 11	0 43	0 13	0 16	0 46	22
40	3 1	2 35	2 7	1 40	1 11	0 43	0 13	0 16	0 46	20
42	3 0	2 34	2 6	1 39	1 10	0 43	0 13	0 16	0 46	18
44	2 58	2 32	2 5	1 38	1 10	0 42	0 13	0 16	0 45	16
46	2 57	2 31	2 4	1 37	1 9	0 42	0 13	0 16	0 45	14
48	2 56	2 30	2 3	1 37	1 9	0 41	0 13	0 16	0 45	12
50	2 55	2 29	2 2	1 36	1 8	0 41	0 13	0 16	0 44	10
52	2 53	2 28	2 1	1 35	1 8	0 41	0 12	0 16	0 44	8
54	2 52	2 27	2 0	1 34	1 7	0 41	0 12	0 16	0 44	6
56	2 51	2 25	1 59	1 34	1 7	0 40	0 12	0 16	0 43	4
58	2 50	2 24	1 58	1 33	1 6	0 40	0 12	0 16	0 43	2
60	2 49	2 23	1 57	1 33	1 6	0 40	0 12	0 16	0 43	0
	ADDE							SVBTRAHE		
Horæ 10. Aſcenſionis rectæ medij Cœli.										

Ho-

ADDE

Poli	47		48		49		50		51		52		53		54		55		Poli
	Horæ 1. Aſcenſionis rectæ Medij Cœli.																		
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	1	28	2	5	2	43	3	20	4	1	4	40	5	23	6	5	6	48	60
2	1	27	2	4	2	42	3	19	4	0	4	39	5	21	6	3	6	46	58
4	1	27	2	4	2	41	3	18	3	58	4	37	5	19	6	1	6	43	56
6	1	26	2	3	2	40	3	17	3	57	4	36	5	17	5	59	6	41	54
8	1	26	2	3	2	39	3	16	3	55	4	34	5	15	5	56	6	38	52
10	1	25	2	2	2	38	3	15	3	54	4	32	5	13	5	54	6	36	50
12	1	25	2	1	2	37	3	13	3	52	4	30	5	10	5	51	6	32	48
14	1	24	2	0	2	36	3	12	3	51	4	29	5	8	5	49	6	31	46
16	1	24	2	0	2	35	3	11	3	49	4	27	5	6	5	46	6	28	44
18	1	23	1	59	2	34	3	10	3	48	4	25	5	4	5	44	6	25	42
20	1	23	1	58	2	33	3	8	3	46	4	23	5	2	5	41	6	22	40
22	1	22	1	57	2	32	3	7	3	44	4	21	5	0	5	39	6	19	38
24	1	22	1	56	2	30	3	6	3	42	4	19	4	58	5	36	6	16	36
26	1	21	1	55	2	29	3	5	3	41	4	17	4	56	5	34	6	13	34
28	1	21	1	54	2	28	3	4	3	39	4	15	4	54	5	31	6	10	32
30	1	20	1	53	2	27	3	3	3	38	4	14	4	52	5	29	6	1	30
32	1	20	1	53	2	26	3	1	3	36	4	12	4	49	5	26	6	5	28
34	1	19	1	52	2	25	3	0	3	34	4	10	4	47	5	24	6	2	26
36	1	19	1	51	2	24	2	59	3	32	4	8	4	44	5	21	5	59	24
38	1	18	1	50	2	23	2	58	3	31	4	6	4	42	5	19	5	56	22
40	1	17	1	49	2	21	2	56	3	29	4	4	4	39	5	19	5	53	20
42	1	16	1	48	2	20	2	55	3	28	4	2	4	37	5	14	5	51	18
44	1	16	1	48	2	19	2	54	3	26	4	0	4	35	5	11	5	48	16
46	1	15	1	47	2	18	2	53	3	25	4	59	4	33	5	9	5	46	14
48	1	15	1	46	2	17	2	51	3	23	4	57	4	31	5	6	5	43	12
50	1	14	1	45	2	16	2	50	3	22	4	55	4	29	5	4	5	40	10
52	1	14	1	45	2	15	2	48	3	20	3	53	4	27	5	1	5	37	8
54	1	13	1	44	2	14	2	47	3	19	3	51	4	25	4	59	5	35	6
56	1	13	1	43	2	13	2	45	3	17	3	49	4	22	4	56	5	32	4
58	1	12	1	42	2	12	2	44	3	16	3	47	4	20	4	54	5	30	2
60	1	12	1	41	2	11	2	42	3	14	3	45	4	18	4	51	5	27	0

SVBTRAHE

Horæ 10. Aſcenſionis rectæ Medij Celi.

SVBTRAHE								ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
Horæ 2. Aſcenſionis rectæ Medij Cœli.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	2 50	2 23	1 57	1 33	1 6	0 40	0 12	0 16	0 43	60
2	2 49	2 23	1 56	1 32	2 5	0 40	0 12	0 16	0 42	58
4	2 47	2 21	1 56	1 32	1 5	0 39	0 12	0 15	0 42	56
6	2 46	2 20	1 55	1 31	1 4	0 39	0 12	0 15	0 42	54
8	2 44	2 19	1 54	1 30	1 4	0 39	0 12	0 15	0 41	52
10	2 43	2 18	1 53	1 29	1 3	0 38	0 12	0 15	0 41	50
12	2 41	2 17	1 53	1 29	1 3	0 38	0 12	0 15	0 41	48
14	2 40	2 16	1 52	1 28	1 2	0 37	0 12	0 15	0 41	46
16	2 39	2 15	1 51	1 28	1 2	0 37	0 11	0 15	0 40	44
18	2 38	2 14	1 50	1 27	1 1	0 37	0 11	0 15	0 40	42
20	2 36	2 13	1 50	1 26	1 1	0 36	0 11	0 15	0 40	40
22	2 35	2 12	1 49	1 25	1 0	0 36	0 11	0 14	0 39	38
24	2 34	2 11	1 48	1 25	0 0	0 36	0 11	0 14	0 39	36
26	2 33	2 10	1 47	1 24	0 59	0 36	0 11	0 14	0 38	34
28	2 31	2 9	1 46	1 23	0 59	0 35	0 11	0 14	0 38	32
30	2 30	2 8	1 45	1 22	0 58	0 35	0 11	0 14	0 38	30
32	2 29	2 7	1 44	1 22	0 58	0 35	0 11	0 14	0 37	28
34	2 28	2 6	1 43	1 21	0 57	0 34	0 11	0 13	0 37	26
36	2 26	2 4	1 42	1 20	0 57	0 34	0 10	0 13	0 37	24
38	2 25	2 3	1 41	1 19	0 50	0 34	0 10	0 13	0 36	22
40	2 23	2 2	1 40	1 19	0 56	0 33	0 10	0 13	0 36	20
42	2 22	2 1	1 39	1 18	0 55	0 33	0 10	0 12	0 35	18
44	2 20	2 0	1 38	1 17	0 55	0 33	0 10	0 12	0 35	16
46	2 19	1 59	1 37	1 16	0 54	0 33	0 10	0 12	0 34	14
48	2 18	1 57	1 36	1 16	0 54	0 32	0 10	0 12	0 34	12
50	2 17	1 56	1 35	1 15	0 53	0 32	0 10	0 12	0 34	10
52	2 15	1 55	1 34	1 15	0 53	0 32	0 10	0 11	0 33	8
54	2 14	1 54	1 33	1 14	0 52	0 32	0 10	0 21	0 33	6
56	2 12	1 53	1 32	1 13	0 52	0 31	0 9	0 11	0 33	4
58	2 11	1 52	1 31	1 12	0 51	0 31	0 9	0 11	0 32	2
60	2 9	1 50	1 30	1 11	0 51	0 31	0 9	0 11	0 32	0
ADDE								SVBTRAHE		
H cræ 9. Aſcenſionis rectæ Medij Cęli.										

Ho-

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
	Horæ 2 Aſcenſionis rectæ Medij Cœli.									
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	1 12	1 40	2 11	2 42	3 14	3 45	4 18	4 51	5 27	60
2	1 11	1 41	2 10	2 41	3 12	3 43	4 16	4 49	5 24	58
4	1 10	1 39	2 8	2 39	3 20	3 41	4 13	4 46	5 21	56
6	1 9	1 38	2 7	2 38	3 9	3 40	4 11	4 44	5 19	54
8	1 9	1 38	2 6	2 37	3 7	3 38	4 9	4 42	5 16	52
10	1 8	1 37	2 5	2 36	3 6	3 36	4 7	4 40	5 13	50
12	1 8	1 37	2 4	2 34	3 4	3 34	4 5	4 37	5 10	48
14	1 7	1 36	2 3	2 33	3 3	3 33	4 3	4 35	5 8	46
16	1 7	1 35	2 2	2 32	3 1	3 31	4 1	4 32	5 5	44
18	1 6	1 34	2 1	2 31	3 0	3 29	3 59	4 30	5 2	42
20	1 6	1 34	2 0	2 29	2 58	3 27	3 57	4 27	5 0	40
22	1 5	1 33	1 59	2 28	2 56	3 25	3 55	4 25	4 57	38
24	1 5	1 32	1 58	2 27	2 54	3 23	3 52	4 22	4 54	36
26	1 4	1 31	1 57	2 26	2 52	3 21	3 50	4 20	4 51	34
28	1 4	1 30	1 56	2 24	2 50	3 19	3 47	4 17	4 48	32
30	1 3	1 29	1 55	2 23	2 49	3 17	3 45	4 15	4 45	30
32	1 3	1 28	1 54	2 21	2 47	3 15	3 41	4 12	4 42	28
34	1 2	1 27	1 53	2 20	2 46	3 13	3 43	4 10	4 40	26
36	1 2	1 27	2 52	2 18	2 44	3 11	3 39	4 8	4 37	24
38	1 1	1 26	1 51	2 17	2 43	3 10	3 37	4 5	4 35	22
40	1 1	1 26	1 50	2 16	2 41	3 8	3 35	4 3	4 32	20
42	1 0	1 25	1 49	2 15	2 40	3 6	3 33	4 0	4 30	18
44	0 59	1 24	1 48	2 13	2 38	3 3	3 31	3 58	4 27	16
46	0 58	1 23	1 47	2 12	2 37	3 4	3 29	3 55	4 24	14
48	0 58	1 22	1 45	2 10	2 35	3 1	3 26	3 53	4 21	12
50	0 57	1 21	1 44	2 9	2 34	2 59	3 24	3 51	4 19	10
52	0 57	1 20	1 43	2 7	2 32	2 57	3 22	3 48	4 16	8
54	0 56	1 19	1 42	2 6	2 31	2 55	3 20	3 46	4 14	6
56	0 56	1 18	1 41	2 4	2 29	2 53	3 18	3 44	4 13	4
58	0 55	1 17	1 40	2 3	2 28	2 52	3 16	3 42	4 9	2
60	0 55	1 17	1 39	2 1	2 26	2 50	3 14	3 39	4 6	0

SVBTRAHE.

Horæ 9. Aſcenſionis rectæ Medij Cœli.

Ho-

	S V B T R A H E															ADDE			
Poli	38		39		40		41		42		43		44		45		46		Poli

Horæ 3. Aſcenſionis rectæ medij Cęli.

M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M	G.	M.	G.	M.	G.	M.	G.	M.	M
0	2	9	1	50	1	30	1	11	0	51	0	31	0	9	0	11	0	32	60
2	2	8	1	49	1	29	1	10	0	50	0	31	0	9	0	10	0	31	58
4	2	7	1	48	1	29	1	10	0	50	0	30	0	9	0	10	0	31	56
6	2	6	1	47	1	28	1	9	0	49	0	30	0	9	0	10	0	30	54
8	2	4	1	46	1	27	1	9	0	49	0	30	0	9	0	9	0	30	52
10	2	3	1	45	1	26	1	8	0	48	0	30	0	9	0	9	0	29	50
12	2	1	1	43	1	25	1	8	0	48	0	29	0	9	0	9	0	29	48
14	2	0	1	42	1	24	1	7	0	47	0	29	0	9	0	9	0	29	46
16	1	59	1	41	1	23	1	6	0	47	0	29	0	9	0	9	0	28	44
18	1	58	1	40	1	22	1	5	0	46	0	29	0	9	0	9	0	28	42
20	1	56	1	39	1	21	1	4	0	46	0	28	0	9	0	9	0	28	40
22	1	55	1	38	1	20	1	3	0	45	0	28	0	9	0	9	0	28	38
24	1	53	1	37	1	19	1	3	0	45	0	28	0	9	0	9	0	27	36
26	1	52	1	36	1	18	1	2	0	44	0	27	0	9	0	9	0	27	34
28	1	51	1	34	1	17	1	1	0	44	0	27	0	8	0	8	0	27	32
30	1	50	1	33	1	16	1	1	0	43	0	27	0	8	0	8	0	26	30
32	1	48	1	32	1	15	1	0	0	43	0	26	0	8	0	8	0	26	28
34	1	47	1	31	1	14	0	59	0	42	0	26	0	8	0	8	0	26	26
36	1	46	1	29	1	13	0	58	0	42	0	26	0	8	0	8	0	25	24
38	1	45	1	28	1	12	0	57	0	41	0	25	0	8	0	8	0	25	22
40	1	43	1	27	1	11	0	57	0	41	0	25	0	8	0	8	0	25	20
42	1	42	1	26	1	10	0	56	0	40	0	24	0	8	0	8	0	25	18
44	1	40	1	24	1	9	0	55	0	40	0	24	0	8	0	8	0	24	16
46	1	39	1	23	1	8	0	54	0	39	0	23	0	8	0	8	0	24	14
48	1	37	1	22	1	7	0	54	0	39	0	23	0	8	0	8	0	24	12
50	1	36	1	21	1	6	0	53	0	38	0	22	0	8	0	8	0	24	10
52	1	34	1	20	1	5	0	52	0	37	0	22	0	7	0	7	0	23	8
54	1	33	1	19	1	4	0	51	0	36	0	22	0	7	0	7	0	23	6
56	1	31	1	17	1	3	0	51	0	36	0	21	0	7	0	7	0	23	4
58	1	30	1	16	1	2	0	50	0	35	0	21	0	7	0	7	0	23	2
60	1	28	1	15	1	1	0	49	0	35	0	21	0	7	0	7	0	22	0

A D D E | SVBTRAHE

Ho. a 8. Aſcenſionis rectæ medij Cęli.

Ho-

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
	Horæ 3. Aſcenſionis rectæ medij Cœli.									
M	G. M.	G. M.	M. G.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 55	1 17	1 39	2 1	2 26	2 50	3 14	3 39	4 6	60
2	0 54	1 16	1 38	1 59	2 24	2 48	3 12	3 37	4 3	58
4	0 53	1 15	1 36	1 56	2 22	2 46	3 10	3 34	4 0	56
6	0 52	1 14	1 35	1 55	2 21	2 44	3 8	3 32	3 57	54
8	0 52	1 13	1 34	1 54	2 19	2 42	3 6	3 29	3 54	52
10	0 51	1 12	1 32	1 53	2 18	2 40	3 5	3 27	3 51	50
12	0 51	1 12	1 31	1 51	2 16	2 38	3 1	3 24	3 48	48
14	0 50	1 11	1 30	1 50	2 15	2 36	2 59	3 22	3 46	46
16	0 49	1 10	1 29	1 49	2 13	2 34	2 57	3 19	3 43	44
18	0 48	1 9	1 28	1 47	2 12	2 33	2 55	3 17	3 41	42
20	0 48	1 9	1 27	1 46	2 10	2 31	2 53	3 15	3 38	40
22	0 47	1 8	1 26	1 45	2 8	2 29	2 51	3 13	3 34	38
24	0 47	1 7	1 25	1 44	2 6	2 27	2 49	3 10	3 32	36
26	0 46	1 6	1 24	1 43	2 5	2 25	2 47	3 8	3 30	34
28	0 46	1 5	1 23	1 42	2 3	2 23	2 45	3 5	3 27	32
30	0 45	1 4	1 22	1 41	2 2	2 22	2 43	3 3	3 25	30
32	0 44	1 3	1 21	1 40	2 0	2 20	2 40	3 1	3 22	28
34	0 43	1 2	1 20	1 39	1 59	2 18	2 38	2 59	3 19	26
36	0 43	1 1	1 19	1 37	1 57	2 16	2 36	2 56	3 16	24
38	0 42	1 0	1 18	1 36	1 56	2 14	2 34	2 54	3 14	22
40	0 42	0 59	1 17	1 35	1 54	2 12	2 32	2 51	3 11	20
42	0 41	0 58	1 16	1 34	1 53	2 11	2 30	2 49	3 9	18
44	0 40	0 58	1 15	1 32	1 51	2 9	2 28	2 46	3 6	16
46	0 39	0 57	1 14	1 31	1 49	2 7	2 26	2 44	3 3	14
48	0 39	0 56	1 12	1 30	1 47	2 6	2 23	2 42	3 0	12
50	0 38	0 55	1 11	1 29	1 46	2 5	2 21	2 40	2 57	10
52	0 38	0 55	1 10	1 27	1 44	2 2	2 19	2 37	2 55	8
54	0 37	0 54	1 9	1 26	1 43	2 0	2 17	2 35	2 52	6
56	0 37	0 53	1 8	1 24	1 40	1 58	2 15	2 32	2 50	4
58	0 36	0 52	1 7	1 23	1 41	1 56	2 13	2 30	2 47	2
60	0 36	0 51	1 6	1 22	1 38	1 54	2 11	2 27	2 45	0

SVBTRAHE

Horæ 8. Aſcenſionis rectæ Medij Cœli.

	SVBTRAHE							ADDE		
Poli	38	39	40	41	42	43	44	45	46	Poli
	Horæ 4. Aſcenſionis rectæ Medij Cœli.									
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	1 28	1 15	1 1	0 49	0 35	0 21	0 7	0 7	0 22	60
2	1 27	1 14	1 0	0 48	0 34	0 21	0 7	0 7	0 22	58
4	1 25	1 12	0 59	0 47	0 34	0 20	0 7	0 7	0 22	56
6	1 24	1 11	0 58	0 46	0 33	0 20	0 7	0 7	0 21	54
8	1 23	1 10	0 57	0 45	0 33	0 20	0 7	0 7	0 21	52
10	1 22	1 9	0 56	0 44	0 32	0 19	0 7	0 7	0 20	50
12	1 20	1 8	0 55	0 43	0 31	0 19	0 7	0 7	0 20	48
14	1 19	1 7	0 54	0 42	0 30	0 19	0 7	0 7	0 19	46
16	1 17	1 5	0 53	0 42	0 30	0 18	0 7	0 7	0 19	44
18	1 16	1 4	0 52	0 41	0 29	0 18	0 6	0 6	0 18	42
20	1 14	1 3	0 51	0 41	0 29	0 18	0 6	0 6	0 18	40
22	1 13	1 2	0 50	0 40	0 28	0 17	0 6	0 6	0 17	38
24	1 11	1 1	0 49	0 40	0 28	0 17	0 6	0 6	0 17	36
26	1 10	0 59	0 48	0 39	0 27	0 17	0 6	0 6	0 16	34
28	1 8	0 58	0 47	0 38	0 27	0 16	0 6	0 6	0 16	32
30	1 7	0 57	0 46	0 37	0 26	0 16	0 6	0 6	0 16	30
32	1 5	0 56	0 45	0 37	0 26	0 16	0 6	0 6	0 15	28
34	1 4	0 55	0 44	0 36	0 25	0 15	0 6	0 6	0 15	26
36	1 2	0 53	0 43	0 35	0 24	0 15	0 6	0 5	0 15	24
38	1 1	0 52	0 42	0 34	0 23	0 14	0 6	0 5	0 14	22
40	0 59	0 51	0 41	0 33	0 23	0 14	0 5	0 5	0 14	20
42	0 58	0 50	0 40	0 32	0 22	0 13	0 5	0 5	0 14	18
44	0 56	0 48	0 39	0 32	0 22	0 13	0 5	0 5	0 13	16
46	0 55	0 47	0 38	0 31	0 21	0 12	0 5	0 5	0 13	14
48	0 53	0 46	0 37	0 30	0 20	0 12	0 5	0 5	0 13	12
50	0 52	0 45	0 36	0 29	0 19	0 12	0 5	0 5	0 12	10
52	0 50	0 43	0 35	0 28	0 19	0 11	0 5	0 5	0 12	8
54	0 49	0 42	0 34	0 27	0 18	0 11	0 5	0 4	0 12	6
56	0 47	0 41	0 33	0 26	0 18	0 11	0 4	0 4	0 11	4
58	0 46	0 40	0 32	0 25	0 17	0 11	0 4	0 4	0 11	2
60	0 44	0 38	0 31	0 24	0 17	0 10	0 4	0 4	0 11	0
	ADDE							SVBTRAHE		
	Horæ 7. Aſcenſionis rectæ Medij Cœli.									

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli
Horæ 4. Aſcenſionis rectæ Medij Cœli.										
M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 36	0 51	1 6	1 22	1 38	1 54	2 11	2 27	2 45	60
2	0 35	0 50	1 5	1 21	1 37	1 53	2 9	2 25	2 43	58
4	0 35	0 50	1 4	1 19	1 35	1 51	2 7	2 23	2 40	56
6	0 34	0 49	1 3	1 18	1 34	1 49	2 5	2 21	2 37	54
8	0 34	0 48	1 2	1 16	1 32	1 47	2 2	2 18	2 34	52
10	0 33	0 47	1 1	1 15	1 31	1 45	2 0	2 16	2 32	50
12	0 32	0 47	1 0	1 14	1 29	1 42	1 58	2 13	2 29	48
14	0 31	0 46	0 59	1 13	1 27	1 41	1 56	2 11	2 26	46
16	0 31	0 45	0 58	1 11	1 25	1 39	1 54	2 8	2 23	44
18	0 30	0 44	0 57	1 10	1 24	1 38	1 52	2 6	2 20	42
20	0 30	0 43	0 55	1 8	1 22	5 36	1 49	2 3	2 17	40
22	0 29	0 42	0 54	1 7	1 20	1 34	1 47	2 1	2 15	38
24	0 29	0 41	0 53	1 6	1 18	1 32	1 45	1 58	2 12	36
26	0 28	0 40	0 52	1 5	1 17	1 30	1 43	1 56	2 10	34
28	0 28	0 39	0 51	1 3	1 15	1 28	1 41	1 53	2 7	32
30	0 27	0 38	0 50	1 2	1 14	1 26	1 39	1 51	2 4	30
32	0 26	0 37	0 48	1 0	1 12	1 24	1 36	1 48	2 1	28
34	0 25	0 36	0 47	0 59	1 11	1 23	1 34	1 46	1 59	26
36	0 25	0 36	0 46	0 58	1 9	1 21	1 32	1 43	1 56	24
38	0 24	0 35	0 45	0 57	1 7	1 19	1 30	1 41	1 53	22
40	0 24	0 34	0 44	0 55	1 5	1 17	1 28	1 38	1 50	20
42	0 23	0 33	0 43	0 54	1 4	1 15	1 26	1 36	1 48	18
44	0 23	0 32	0 42	0 52	1 2	1 13	1 23	1 33	1 45	16
46	0 22	0 31	0 41	0 51	1 1	1 11	1 21	1 31	1 42	14
48	0 22	0 31	0 40	0 50	0 59	1 9	1 19	1 29	1 40	12
50	0 21	0 30	0 39	0 49	0 57	1 8	1 17	1 27	1 37	10
52	0 21	0 29	0 38	0 47	0 55	1 6	1 15	1 24	1 34	8
54	0 20	0 28	0 37	0 46	0 54	1 4	1 13	1 22	1 31	6
56	0 20	0 27	0 35	0 44	0 52	1 2	1 10	1 19	1 28	4
58	0 19	0 26	0 34	0 43	0 51	1 0	1 8	1 17	1 26	2
60	0 18	0 26	0 33	0 42	0 49	0 58	1 6	1 14	1 23	0

SVBTRAHE

Horæ 7. Aſcenſionis rectæ Medij Cœli.

SVBTRAHE															ADDE				
Poli	38		39		40		41		42		43		44		45		46		Poli
Horæ 5. Aſcenſionis rectæ Medij Cœli.																			
M	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	G.	M.	M
0	0	44	0	38	0	31	0	24	0	17	0	10	0	4	0	4	0	11	60
2	0	42	0	37	0	30	0	23	0	16	0	10	0	4	0	4	0	10	58
4	0	42	0	36	0	29	0	23	0	16	0	9	0	4	0	4	0	10	56
6	0	41	0	34	0	28	0	22	0	15	0	9	0	4	0	4	0	9	54
8	0	39	0	33	0	27	0	21	0	15	0	9	0	3	0	4	0	9	52
10	0	38	0	32	0	26	0	20	0	14	0	9	0	3	0	4	0	8	50
12	0	36	0	31	0	25	0	19	0	14	0	8	0	3	0	3	0	8	48
14	0	35	0	29	0	24	0	19	0	13	0	8	0	3	0	3	0	7	46
16	0	33	0	28	0	23	0	18	0	13	0	8	0	3	0	3	0	7	44
18	0	32	0	27	0	22	0	17	0	12	0	7	0	3	0	3	0	6	42
20	0	30	0	26	0	21	0	16	0	12	0	7	0	3	0	3	0	6	40
22	0	29	0	24	0	20	0	15	0	11	0	7	0	3	0	3	0	6	38
24	0	27	0	23	0	19	0	15	0	11	0	6	0	3	0	3	0	5	36
26	0	26	0	22	0	18	0	14	0	10	0	6	0	3	0	3	0	5	34
28	0	24	0	21	0	17	0	13	0	10	0	6	0	3	0	3	0	5	32
30	0	23	0	20	0	16	0	12	0	9	0	6	0	2	0	2	0	5	30
32	0	21	0	18	0	15	0	12	0	8	0	5	0	2	0	2	0	4	28
34	0	20	0	17	0	14	0	11	0	7	0	5	0	2	0	2	0	4	26
36	0	18	0	16	0	13	0	10	0	7	0	5	0	2	0	2	0	4	24
38	0	17	0	15	0	12	0	9	0	6	0	4	0	2	0	2	0	3	22
40	0	15	0	13	0	11	0	9	0	6	0	4	0	2	0	2	0	3	20
42	0	14	0	12	0	10	0	8	0	5	0	3	0	2	0	2	0	2	18
44	0	12	0	11	0	9	0	7	0	5	0	3	0	2	0	2	0	2	16
46	0	11	0	10	0	8	0	6	0	4	0	2	0	1	0	1	0	2	14
48	0	9	0	8	0	7	0	6	0	4	0	2	0	1	0	1	0	1	12
50	0	8	0	7	0	5	0	5	0	3	0	2	0	1	0	1	0	1	10
52	0	6	0	6	0	4	0	4	0	2	0	1	0	1	0	1	0	1	8
54	0	5	0	4	0	3	0	3	0	1	0	1	0	1	0	1	0	1	6
56	0	3	0	3	0	2	0	2	0	1	0	0	0	0	0	0	0	0	4
58	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ADDE															SVBTRAHE				
Horæ 6. Aſcenſionis rectæ Medij Cœli.																			

Ho-

ADDE

Poli	47	48	49	50	51	52	53	54	55	Poli

Horæ 5 Aſcenſionis rectæ Medij Cœli.

M	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	G. M.	M
0	0 18	0 26	0 23	0 42	0 49	0 56	1 6	1 14	1 23	60
2	0 17	0 25	0 22	0 41	0 48	0 58	1 3	1 12	1 21	58
4	0 17	0 24	0 31	0 39	0 46	0 54	1 1	1 9	1 18	56
6	0 16	0 23	0 30	0 38	0 45	0 52	0 59	1 7	1 15	54
8	0 16	0 22	0 29	0 36	0 43	0 50	0 57	1 4	1 12	52
10	0 15	0 21	0 28	0 35	0 41	0 48	0 55	1 2	1 9	50
12	0 15	0 20	0 27	0 33	0 39	0 46	0 53	0 59	1 6	48
14	0 14	0 19	0 26	0 32	0 37	0 44	0 51	0 57	1 3	46
16	0 13	0 19	0 24	0 31	0 35	0 42	0 48	0 54	1 0	44
18	0 12	0 18	0 25	0 30	0 34	0 40	0 46	0 52	0 58	42
20	0 12	0 17	0 22	0 28	0 32	0 38	0 44	0 49	0 55	40
22	0 11	0 16	0 21	0 27	0 31	0 36	0 42	0 47	0 52	38
24	0 11	0 15	0 19	0 25	0 29	0 34	0 40	0 44	0 49	36
26	0 10	0 14	0 18	0 24	0 27	0 32	0 38	0 42	0 47	34
28	0 9	0 13	0 17	0 22	0 25	0 30	0 35	0 39	0 44	32
30	0 8	0 12	0 16	0 21	0 24	0 28	0 33	0 37	0 42	30
32	0 8	0 12	0 15	0 19	0 22	0 26	0 31	0 35	0 39	28
34	0 7	0 11	0 14	0 18	0 21	0 24	0 29	0 33	0 36	26
36	0 7	0 10	0 13	0 16	0 19	0 22	0 26	0 30	0 33	24
38	0 6	0 9	0 12	0 15	0 18	0 20	0 24	0 28	0 30	22
40	0 5	0 8	0 11	0 14	0 16	0 18	0 22	0 25	0 24	20
42	0 4	0 7	0 10	0 13	0 14	0 16	0 20	0 23	0 27	18
44	0 4	0 6	0 8	0 11	0 12	0 14	0 17	0 20	0 21	16
46	0 3	0 5	0 7	0 10	0 11	0 13	0 15	0 18	0 19	14
48	0 3	0 4	0 6	0 8	0 9	0 11	0 13	0 15	0 16	12
50	0 2	0 3	0 5	0 7	0 8	0 10	0 11	0 13	0 14	10
52	0 2	0 3	0 4	0 6	0 6	0 8	0 .8	0 10	0 11	8
54	0 1	0 2	0 3	0 4	0 5	0 6	0 6	0 8	0 8	6
56	0 1	0 2	0 2	0 3	0 3	0 4	0 4	0 5	0 6	4
58	0 0	0 1	0 1	0 1	0 1	0 2	0 2	0 2	0 3	2
60	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0

SVBTRAHE

Hora 6. Aſcenſionis rectæ Medij Cęli.

Tabula oſtendens quanta proportio, quatuor minutorum toti anno ſolari competentium, competat ſingulis anni ſolaris diebus.

Dies	I.II.I. II	Dies	I.II.III.	Dies	I.II.III.	Dies	I II.III.	Dies	I.II.III.
1	0.0. 39	38	0.24.55	75	0.49.10	112	1.13.25	149	1.37.40
2	0.1. 19	39	0.25.34	76	0.49.49	113	1.14. 4	150	1.38.20
3	0.1. 58	40	0.26.13	77	0.50.28	114	1.14.44	151	1.38.59
4	0.2. 38	41	0.26.53	78	0.51. 8	115	1.15.23	152	1.39.38
5	0.3. 17	42	0.27.32	79	0.51.47	116	1.16. 2	153	1.40.18
6	0.3. 57	43	0.28.11	80	0.52.26	117	1.16.42	154	1.40.57
7	0.4. 36	44	0.28.51	81	0. 53. 6	118	1.17.21	155	1.41.36
8	0.5. 15	45	0.29.30	82	0.53.45	119	1.18. 0	156	1.42.16
9	0.5. 55	46	0.30. 9	83	0 54.24	120	1.18.40	157	1.42.55
10	0.6. 34	47	0.30.49	84	0.55. 4	121	1.19.19	158	1.43.34
11	0.7. 14	48	0.31.28	85	0.55.43	122	1.19.58	159	1.44.14
12	0.7. 53	49	0.32. 7	86	0.56.22	123	1.20.38	160	1.44.53
13	0.8. 33	50	0.32.47	87	0.57. 2	124	1.21.17	161	1.45.32
14	0.9. 12	51	0.33.26	88	0.57.41	125	1.21.56	162	1.46.12
15	0.9. 51	52	0.34. 5	89	0.58.20	126	1.22.36	163	1.46.51
16	0.10.39	53	0.34.45	90	0.59. 0	127	1.23.15	164	1.47.30
17	0.11.10	54	0.35.24	91	0.59.39	128	1.23.54	165	1.48.10
18	0.11.50	55	0.36. 3	92	1.0. 18	129	1.24.34	166	1.48.49
19	0.12.29	56	0.36.43	93	1.0. 58	130	1.25.13	167	1.49.28
20	0.13. 8	57	0.37.22	94	1.1. 37	131	1.25.52	168	1.50. 8
21	0.13.48	58	0 38. 1	95	1.2. 16	132	1.26.32	169	1.50.47
22	0.14.27	59	0.38.41	96	1.2. 56	133	1.27.11	170	1.51.26
23	0.15. 7	60	0.39.20	97	1.3. 35	134	1.27.50	171	1.51. 6
24	0.15.46	61	0.39.59	98	1.4. 14	135	1.28.30	172	1.51.45
25	0 16.13	62	0.40.39	99	1.4. 54	136	1.29. 9	173	1.53.24
26	0.17. 3	63	0.41.18	100	1.5. 33	137	1.29 48	174	1.54. 4
27	0.17.42	64	0.41.57	101	1.6. 12	138	1.30.28	175	1.54.43
28	0.18.21	65	0.42.37	102	1.6. 52	139	1.31. 7	176	1.55.22
29	0.19. 1	66	0.43.16	103	1.7. 31	140	1.31.46	177	1.56. 2
30	0.19.40	67	0.43.55	104	1.8. 10	141	1.32.26	178	1.56.41
31	0.20.19	68	0.44.35	105	1.8. 50	142	1.33. 5	179	1.57.10
32	0.20.59	69	0.45.44	106	1.9. 29	143	1.33.44	180	1.58. 9
33	0.21.38	70	0.45.53	107	1.10. 8	144	1.34.24	181	1.58.39
34	0.22.17	71	0.46.32	108	1.10.48	145	1.35. 3	182	1.59.18
35	0.22.57	72	0.47.12	109	1.11.27	146	1.35.42	183	1.59.58
36	0.23.36	73	0.47.51	110	1.12. 6	147	1.36.22	184	2. 0 37
37	0.24.15	74	0.48.30	111	1.12.46	148	1.37. 1	185	2. 1.16

Tabu-

Tabula oſtendens quanta proportio, quatuor minutorum toti anno ſolari competentium, competat ſingulis anni ſolaris diebus.

Dies	I.II.III	Dies	I.II.III	Dies	I.II.III	Dies	I.II.III	Dies	I.II.III.
186	2.1. 56	222	2.25.32	258	2.49. 8	294	3.12.44	330	3.36.20
187	2.2. 35	223	2.26.11	259	2.49.47	295	3.13.23	331	3.36.59
188	2.3. 14	224	2.26.50	260	2.50.26	296	3.14. 2	332	3.37.38
189	2.3. 54	225	2.27.30	261	2.51. 6	297	3.14.42	333	3.38.18
190	2.4. 33	226	2.28. 9	262	2.51.45	298	3.15.21	334	3.38.57
191	2.5. 22	227	2.28.48	263	2.52.24	299	3.16. 0	335	3.39.36
191	2.5. 52	228	2.29.28	264	2.53. 4	300	3.16.40	336	3.40.16
193	2.6. 31	229	2.30. 7	265	2.53.43	301	3.17.19	337	3.40.55
194	2.7. 10	230	2.30.46	266	2.54.22	302	3.17.58	338	3.41.34
195	2.7. 50	231	2.31.26	267	2.55. 2	303	3.18.38	339	3.42.13
196	2.8. 29	232	2.32. 5	268	2.55.41	304	3.19.17	340	3.42.53
197	2.9. 8	233	2.32.44	269	2.56.20	305	3.19.56	341	3.43.32
198	2.9. 48	234	2.33.24	270	2.57. 0	306	3.20.36	342	3.44.12
199	2.10.27	235	2.34. 3	271	2.57.39	307	3.21.15	343	3.44.51
200	2.11. 6	236	2.34.42	272	2.58.18	308	3.21.54	344	3.45.30
201	2.11.46	237	2.35.22	273	2.58.58	309	3.22.34	345	3.46.10
202	2.12.25	238	2.36. 1	274	2.59.37	310	3.23.13	346	3.46.49
203	2.13. 4	239	2.36.40	275	3.0. 16	311	3.23.52	347	3.47.28
204	2.13.44	240	2.37.20	276	3.0. 56	312	3.24.32	348	3.48. 8
205	2.14.23	241	2.37.59	277	3.1. 35	313	3.25.11	349	3.48.47
206	2.15. 2	242	2.38.38	278	3.2. 14	314	3.25.50	350	3.49.26
207	2.15.42	243	2.39.18	279	3.2. 54	315	3.26.30	351	3.50. 6
208	2.16.21	244	2.39.57	280	3.3. 33	316	3.27. 9	352	3.50.45
209	2.17. 0	245	2.40.36	281	3.4. 12	317	3.27.48	353	3.51.24
210	2.17.40	246	2.41.16	282	3.4. 52	318	3.28.28	354	3.52. 4
211	2.18.19	247	2.41.55	283	3.5. 31	319	3.29. 7	355	3.52.43
212	2.18.58	248	2.42.34	284	3.6. 10	320	3.29.46	356	3.53.22
213	2.19.38	249	2.43.14	285	3.6. 50	321	3.30.26	357	3.54. 2
214	2.20.17	250	2.43.53	286	3.7. 29	322	3.31. 5	358	3.54.41
215	2.20.56	251	2.44.32	287	3.8. 8	323	3.31.44	359	3.55.20
216	2.21.36	252	2.45.12	288	3.8. 48	324	3.32.24	360	3.56. 0
217	2.22.15	253	2.45.51	289	3.9. 27	325	3.33. 3	361	3.56.39
218	2.22.54	254	2.46.30	290	3.10. 6	326	3.33.42	361	3.57.18
219	2.23.34	255	2.47.10	291	3.10.46	327	3.34.22	363	3.57.58
220	2.24.13	256	2.47.49	292	3.11.25	328	3.35. 1	364	3.58.37
221	2.24.52	257	2.48.28	293	3.12. 4	329	3.35.40	365	3.59.16
								266	3.59.56

Tabula

Tabula Declinationum.

Latitudo Septentrionalis.

♋	0		1		2		3		4		5		6		7		8		9		♊
	o	l.	o	l.	o	l.	o	l.	o	l.	o	l.	o	l.	o	l.	o	l.	o	l.	
0	23	30	24	30	25	30	26	30	27	30	28	30	29	30	30	30	31	30	32	30	30
1	23	30	24	30	25	30	26	30	27	30	28	30	29	30	30	30	31	30	32	30	29
2	23	29	24	29	25	29	26	29	27	29	28	29	29	29	30	29	31	29	32	29	28
3	23	28	24	28	25	28	26	28	27	28	28	28	29	28	30	28	31	28	32	28	22
4	23	26	24	26	25	26	26	26	27	26	28	26	29	26	30	26	31	26	32	26	26
5	23	24	24	24	25	24	26	24	27	24	28	24	29	24	30	24	31	24	32	24	25
6	23	22	24	22	25	22	26	22	27	21	28	21	29	21	30	21	31	21	32	21	24
7	23	19	24	19	25	19	26	19	27	18	28	18	29	18	30	18	31	18	32	18	23
8	23	15	24	15	25	16	26	16	27	15	28	15	29	15	30	15	31	15	32	15	22
9	23	12	24	12	25	12	26	12	27	12	28	11	29	11	30	11	31	11	32	10	21
10	23	7	24	7	25	7	26	7	27	7	28	6	29	6	30	6	31	6	32	6	20
11	23	2	24	3	25	2	26	2	27	2	28	1	29	1	30	1	31	1	32	1	19
12	22	59	23	57	24	57	25	56	26	56	27	56	28	55	29	55	30	55	31	55	18
13	22	51	23	52	24	51	25	50	26	50	27	50	28	49	29	49	30	49	31	49	17
14	22	45	23	46	24	45	25	44	26	44	27	44	28	43	29	43	30	43	31	43	16
15	22	39	23	39	24	39	25	38	26	38	27	37	28	37	29	36	30	36	31	36	15
16	22	32	23	32	24	32	25	31	26	31	27	30	28	30	29	29	30	29	31	29	14
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Tabula Declinationum.

Latitudo Septemtrionalis.

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6	21	22	22	21	23	20	24	19	25	19	26	17	27	16	28	15	29	14	30	13	24
7	21	32	22	31	23	30	24	30	25	29	26	28	27	27	28	26	29	25	30	26	23
8	21	42	22	41	23	40	24	40	25	39	26	38	27	37	28	36	29	36	30	36	22
9	21	51	22	51	23	50	24	50	25	49	26	48	27	47	28	46	29	46	30	46	21
10	22	0	23	0	23	59	24	59	25	58	26	57	27	56	28	55	29	55	30	55	20
11	22	9	23	9	24	8	25	8	26	7	27	6	28	5	29	4	30	4	31	4	19
12	22	17	23	17	24	16	25	16	26	15	27	14	28	14	29	13	30	13	31	13	18
13	22	25	23	25	24	24	25	24	26	23	27	22	28	22	29	21	30	21	31	21	17
14	22	32	23	32	24	32	25	31	26	31	27	30	28	30	29	29	30	29	31	29	16
15	22	39	23	39	24	39	25	38	26	38	27	37	28	37	29	36	30	30	31	36	15
16	22	46	23	46	24	45	25	44	26	44	27	44	28	43	29	43	30	43	31	43	14
17	22	52	23	51	24	51	25	50	26	50	27	50	28	49	29	49	30	49	31	49	13
18	22	57	23	57	24	57	25	56	26	56	27	56	28	55	29	55	30	55	31	55	12
19	23	3	24	2	25	2	26	2	27	2	28	1	29	1	30	1	31	1	32	1	11
20	23	7	24	7	25	7	26	7	27	7	28	6	29	6	30	6	31	6	32	6	10
21	23	12	24	12	25	12	26	12	27	12	28	11	29	11	30	11	31	11	32	10	9
22	23	15	24	16	25	16	26	16	27	15	28	15	29	15	30	15	31	15	32	15	8
23	23	19	24	19	25	19	26	19	27	18	28	18	29	18	30	18	31	18	32	18	7
24	23	22	24	22	25	22	26	22	27	21	28	21	29	21	30	21	31	21	32	21	6
25	23	24	24	24	25	24	26	24	27	24	28	24	29	24	30	24	31	24	32	24	5
26	23	26	24	26	25	26	26	26	27	26	28	26	29	26	30	26	31	26	32	26	4
27	23	28	24	28	25	28	26	28	27	28	28	28	29	28	30	28	31	28	32	28	3
28	23	29	24	29	25	29	26	29	27	29	28	29	29	29	30	29	31	29	32	29	2
29	23	30	24	30	25	30	26	30	27	30	28	30	29	30	30	30	31	30	32	30	1
30	23	30	24	30	25	30	26	30	27	30	28	30	29	30	30	30	31	30	32	30	0

Tabula Cœli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♈	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.II.I.*
0	23.58.28	23.56.52	23.55.16	23.53.40	23.52. 4	23.50.28	23.48. 2	23.47.12	23.45.36
1	0. 2. 8	0. 0. 32	23.58.56	23.57.20	23.55.44	23.54. 8	23.52.32	23.50.52	23.49.16
2	0. 5. 48	0. 4. 12	0. 2.36	0. 1. 0	23.59.24	23.57.48	23.56.12	23.54.32	23.52.56
3	0. 9. 28	0. 7. 52	0. 6.16	0. 4.40	0. 3. 4	0. 1.28	23.59.52	23.58.16	23.56.40
4	0. 13. 8	0. 11.32	0. 9.56	0. 8.20	0. 6.44	0. 5. 8	0. 3.32	0. 1.56	0. 0.20
5	0. 16.48	0. 15.12	0. 13.36	0. 12. 0	0. 10.24	0. 8.48	0. 7.12	0. 5.36	0. 4. 0
6	0. 20.28	0. 18.52	0. 17.16	0. 15.40	0. 14. 4	0. 12.28	0. 10.52	0. 9.16	0. 7.40
7	0. 24. 8	0. 22.32	0. 20.56	0. 19.20	0. 17.44	0. 16. 8	0. 14.32	0. 12.56	0. 11.20
8	0. 27.48	0. 26.12	0. 24.36	0. 23. 0	0. 21 24	0. 19.48	0. 18.12	0. 16.40	0. 15. 4
9	0. 31.28	0. 29.52	0. 28.16	0. 25.40	0. 25 4	0. 23.28	0. 21.52	0. 20.20	0. 18.44
10	0. 35. 8	0. 33.32	0. 31.56	0. 30.20	0. 28.44	0. 27. 8	0. 25.32	0. 24. 0	0. 22.24
11	0. 38.48	0. 37.12	0. 35.40	0. 34. 4	0. 32.28	0. 30.52	0. 29.16	0. 27.40	0. 26. 4
12	0. 41.32	0. 40.56	0. 39.24	0. 37.48	0. 36.12	0. 34.36	0. 33. 0	0. 31.24	0. 29.48
13	0. 46.12	0. 44.36	0. 43. 4	0. 41.28	0. 39.52	0. 38.16	0. 30.40	0. 35. 4	0. 33.28
14	0. 49.56	0. 48.20	0. 46.48	0. 45.12	0. 43.36	0. 42. 0	0. 40.24	0. 38.48	0. 37.12
15	0. 53.32	0. 52. 4	0. 50.32	0. 48.56	0. 47.20	0. 45.44	0. 44. 8	0. 42.32	0. 40.56
16	0. 57.20	0. 55.48	0. 54.16	0. 52 40	0. 51. 4	0. 49.28	0. 47.52	0. 46.16	0. 44.40
17	1. 1. 4	0. 59.32	0. 58. 0	0. 56.24	0. 54.48	0. 53.12	0. 51.36	0. 50. 0	0. 48.24
18	1. 4.48	1. 3.16	1. 1.44	1. 0. 8	0. 58.36	0. 57. 0	0. 55.24	0. 53 48	0. 52.12
19	1. 8.32	1. 7.10	1. 5.28	1. 3.52	1. 2.20	1. 0.44	0. 59. 8	0. 57.32	0. 55.56
20	1. 12.16	1. 10.44	1. 9.12	1. 7.36	1. 6 4	1. 4.28	1. 2.56	1. 1.20	0. 59.44
21	1. 16. 0	1. 14.28	1. 12.56	1. 11.24	1. 9.52	1. 8.16	1. 6.44	1. 5. 8	1- 3.32
22	1. 19.44	1. 18.12	1. 16.44	1. 15.12	1. 13.40	1. 12. 4	1. 10.32	1. 8.56	1. 7.20
23	1. 23.32	1. 22. 0	1. 20.32	1. 19. 0	1. 17.28	1. 15.52	1. 14.20	1. 12.44	1. 11. 8
24	1. 27.20	1. 25.48	1. 24.20	1. 22.48	1. 21.16	1. 19.40	1. 18. 8	1. 16.32	1. 14.56
25	1. 31. 8	1. 29.36	1. 28. 8	1. 26.36	1. 25. 4	1. 23.28	1. 21.56	1. 20.20	1. 18.44
26	1. 34 56	1. 33.24	1. 31.56	1. 30.24	1. 28.52	1. 27.20	1. 25.48	1. 24.12	1. 22.36
27	1. 38.44	1. 37.16	1 35.48	1. 34.16	1. 32.44	1. 31.12	1. 28.40	1. 28. 4	1. 26.28
28	1. 42.32	1. 41. 4	1. 39.36	1. 38. 4	1. 36.36	1. 35. 4	1. 33.32	1. 31.56	1. 30.20
29	1. 46.20	1. 44.52	1. 43.28	1. 41.56	1. 40.28	1. 38.56	1. 37.24	1. 35.48	1. 34.12
30	1. 50.12	1. 48.44	1. 47.20	1. 45.48	1. 44.24	1. 42.48	1. 41.16	1. 39.44	1. 38. 8

Tabu-

Tabula Cœli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	♈
0. 1.32	0. 3. 8	0. 4 44	0. 6.20	0. 7.56	0. 9.32	0.11. 8	0.12.48	0.14.24	0
0. 5.12	0 6.48	0. 8.24	0.10. 0	0.11.36	0.13.12	0.14.48	0.16.24	0.18. 4	1
0. 8.52	0.10.28	0.12. 4	0.13.40	0.15.16	0.16.52	0.18.28	0.20. 4	0.21.44	2
0.12 32	0.14. 8	0 15.44	0,17.20	0.18.56	0.20.32	0,22. 8	0.23.44	0.25.24	3
0.16.12	0.17.48	0.19,24	0.21. 0	0.22.36	0.24.12	0.25.48	0.27.20	0.29. 0	4
0.19.52	0.21.28	0.23. 4	0.24.40	0.26.16	0.27.52	0.29.28	0.31. 0	0.32.40	5
0.23.36	0.25.12	0.26.48	0.28.24	0.30. 0	0.31.32	0.32. 8	0.34.40	0.36.19	6
0.27.16	0.28.52	0.30.38	0.32. 4	0.33.40	0.35.12	0.36.48	0.38.20	0.39.56	7
0.30.56	0.32.32	0.34. 8	0.35.44	0.37.20	0.38.52	0.40.28	0.42. 0	0.43.36	8
0.34.36	0.36.12	0.37.48	0.39.24	0.41. 0	0.42.32	0.44. 8	0.45.40	0.47,16	9
0.38.16	0.39.52	0.41.28	0.43. 4	0.44.40	0.46.12	0.47.48	0.49.16	0.50.52	10
0.42.56	0.43.32	0.45 8	0.46.44	0.48.20	0.49.52	0.51.28	0.52.56	0.54.32	11
0.45.40	0.47.12	0.48.52	0.50.24	0,52. 0	0.53.32	0.55. 8	0.56.36	0.58.12	12
0.49.20	0.50.52	0.52.32	0.54. 4	0.55.40	0.57.12	0.58.44	1. 0.16	1 1,48	13
0.54. 4	0.54.36	0.56.12	0.57.44	1.59.20	1. 0.52	1. 2.24	1. 3.56	1. 5,28	14
0.56.18	0.58.20	0.59.52	1. 1.24	1. 3. 0	1. 4.32	1. 6. 4	1. 7.36	1. 9. 8	15
1. 0.28	1. 2. 0	1. 3.32	1. 5. 4	1. 6.40	1. 8.12	1, 9.44	1.11.16	1.12.48	16
1. 4. 8	1. 5.40	1. 7.12	1. 8.44	1.10 20	1.11.52	1.13.24	1.14.56	1.16.24	17
1. 7.52	1. 9.24	1.10.56	1.12.28	1.14. 0	1.15.52	1 17. 4	1.18.36	1.20. 4	18
1.11.36	1,13. 8	1.14.40	1.16. 8	1.17.40	1.19.12	1.20.44	1.22.16	1. 23.4	19
1:15. 0	1.16.52	1.18.24	1.19.52	1.21.24	1.22.52	1.24.24	1.25.56	1,27.24	20
1.19. 4	1.20.36	1.22. 8	1.23.36	1,25. 8	1.26.36	1.28. 8	1.29.36	1.31. 4	21
1.22.48	1.24.20	1.25.52	1.27.20	1.28.48	1.30.10	1.31.48	1.33.16	1.34.44	22
1.26.32	1.28. 4	1.29.36	1.31. 4	1.32.32	1.34. 0	1.35.28	1.36.56	1.38.24	23
1.30.20	1.31.48	1:33.20	1.34.48	1.36.16	1.37.44	1.39 12	1.40.40	1.42.4.	24
1.34. 4	1.35.32	1.37. 4	1.38.32	1.40. 0	1.41.24	1.42.52	1.44.20	1.45.44	25
1.37.52	1.39.20	1.40. 8	1.42.16	1.43.44	1.45. 8	1.46.36	1.48. 0	1.49.24	26
1.41.40	1.43, 8	1.44.36	1.46. 0	1.47.28	1.48.52	1.50.20	1.51.44	1.53. 8	27
1.45;28	1.46.52	1.48,20	1.49.44	1.51.12	1.52.36	1.54. 0	1.55.24	1.56.48	28
1.49.16	1.50.40	1.52. 4	1,53.28	1.54.56	1.56.20	1.57.44	1.59. 8	2. 0.32	29
1.53. 4	1.54.28	1.55.52	1.57.16	1.58.40	2. 0. 4	2. 1.28	2. 2.52	2. 4.16	30

Tabu-

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Tabula Cœli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♉	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
0	1.50.12	1.48.44	1.47.20	1.45.48	1.44.24	1.42.48	1.41.16	1.39.44	1.38. 8
1	1.54. 0	1.52.32	1.51. 8	1.49.40	1.48.12	1.46.40	1.45. 8	1.43.36	1.42. 4
2	1.57.48	1.56.24	1.55. 0	1.53.32	1.52. 4	1.50.30	1.49. 4	1.47.32	1.46. 0
3	2. 1.40	2 0.16	1.58.52	1.57.24	1.55.56	1.54.28	1.53. 0	1.51.28	1.49.56
4	2. 5.32	2. 4. 8	2. 2.44	2. 1.16	1.59.52	1.58.24	1.56.56	1.55.24	1.53.52
5	2. 9.24	2. 8. 0	2. 6.36	2. 5.12	2. 3.48	2. 2.10	2 0.52	1.59.20	1.57.52
6	2.13. 0	2.11.56	2.10.32	2. 9. 8	2. 7.44	2. 6.16	2. 4.48	2. 3.20	2. 1.52
7	2.17.12	2.15.52	2.14.28	2.13. 4	2.11.40	2.10.12	2. 8. 8	2. 7.20	2 5.52
8	2.21. 8	2.19.48	2.18.24	2.17. 0	2.15.36	2.14.12	2.12.48	2.11.20	2. 9.52
9	2.25. 4	2.23.44	2.22.24	2.21. 0	2.19.36	2.18.12	2.16.48	2.15.24	2.13.56
10	2 29. 0	2.27.40	2.26.20	2.25. 0	2.23.36	2.22.12	2.20.48	2.19. 4	2.18. 0
11	2.32.56	2.31.36	2.30.20	2.29. 0	2.27.36	2.26.12	2.24.52	2.23.28	2.22. 4
12	2.36.56	2.35.36	2.34.20	2.33. 0	2.31.40	2.30.16	2.28.56	2.27.32	2.26. 8
13	2.40.52	2.39.36	2.38.20	2.37. 0	2.35.44	2.34.20	2.33. 0	2.31.36	2.30.12
14	2.44.52	2.43.36	2.42.20	2.41. 4	2.39.48	2.38.24	2.37. 4	2.35.44	2.34.20
15	2.48.52	2.47.36	2.46.24	2.45. 8	2.43.52	2.42.32	2.41.12	2.39.52	2.38.28
16	2.52.52	2.51.36	2.50.24	2.49.12	2.47.56	2.46.36	2.45.16	2.44. 0	2.42.36
17	2.56.52	2.55.40	2.54.28	2.53.16	2.52. 0	2.50.40	2.49.24	2.48. 8	2.46.48
18	3. 0.56	2.59.44	2.58.32	2.57.20	2.56. 4	2.54.48	2.53.32	2.52 16	2.51. 0
19	3. 4.56	3. 3.48	3. 2.36	3. 1.24	3. 0.12	2.58.56	2.57.40	2.56.28	2.55.12
20	3. 9. 0	3. 7.52	3. 6.40	3. 5.32	3. 4.20	3. 3. 4	3. 1.52	3. 0.40	2.59.24
21	3.13. 4	3.11.56	3.10.48	3. 9.40	3. 8.28	3. 7.16	3. 6. 4	3. 4.52	3. 3.36
22	3.17. 8	3 16. 0	3.14.56	3.13.48	3.12.36	3.11.28	3.10.16	3. 9. 4	3. 7.52
23	3.21.12	3.20. 8	3.19. 4	3.18.56	3.16.48	3.15.40	3.14.28	3.13.20	3.12. 8
24	3.25.20	3.24.16	3.23.12	3 22. 9	3.21. 0	3.19.52	3.18.44	3.17.36	3.16.24
25	3.29.28	3.28.24	3.27.24	3.26.20	3.25.12	3.24. 8	3.23. 0	3.21.52	3.20. 4
26	3.33.36	3.32.36	3.31.36	3.30.32	3.29.28	3.28.24	3.27.16	3.26.12	3.25. 4
27	3.37.48	3.36.48	3.35.48	3.34.48	3.33.44	3.32.40	3.31.36	3.30.32	3.29.24
28	3.41.56	3.41. 0	3.40.10	3.39. 0	3.38. 0	3.36.56	3.35.52	3.34.52	3.33.44
29	3.46. 8	3.45.12	3.44.12	3.43.16	3.42.16	3.41.12	3.40.12	3.39.12	3.38. 8
30	3.50.20	3.49.24	3.48.28	3.47.32	3.46.32	3.45.32	3.44.22	3.43.32	3.42.32

Tabu-

Tabula Cęli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	♉
1.53. 4	1.54.28	1 55.53	2.57 16	1.58.40	2. 0. 4	2. 1.28	2. 2.52	2. 4.16	0
1.56.52	1.50.16	1.59.40	2. 1. 4	2. 2.28	2. 3.48	2. 5.12	2. 6.36	2. 7.56	1
2. 0.40	2. 2. 4	2. 3.28	2. 4.53	2. 6.16	2. 7.36	2. 8.56	2.10.20	2.11.40	2
2. 4.28	2. 5.52	2. 7.16	2. 8.40	2.10. 4	2.11.24	2.12.44	2.14. 4	2.15.24	3
2. 8.20	2. 9.40	2.11. 4	2.12.28	2.13.48	2.15. 8	2.16.28	2.17.48	2.19. 8	4
2.12.12	2.13.32	2.14.52	2.16.16	2.17 36	2.18 56	2.20.16	2.21.32	2.22.52	5
2.16. 4	2.17.24	2.18.44	2.20. 4	2.21.24	2.22.44	2.24. 4	2.25.20	2.26.36	6
2.19.55	2.21.16	2.22.36	2.23.52	2.25.12	2.26.32	2 27.48	2.29. 4	2.30.20	7
2.23.48	2.25. 8	2.26.28	2.27.44	2.29. 0	2.30.20	2.31.36	2.32.52	2.34. 8	8
2.27.44	2.29. 0	2.30.20	2.31.36	2.32.52	2.34. 8	2.35.24	2.36.40	2.37.56	9
2.31.36	2.32.52	2.34.12	2.35.18	2.36.44	2.37.56	2.39.12	2.40.28	2.41 44	10
2.35.32	2.36 48	2.38. 4	2.39.20	2.40.36	2.41.48	2.43. 0	2.44.16	2.45.32	11
2.39.28	2.40.44	2.42. 0	2.43.12	2.44.28	2.45.40	2.46.52	2.48. 4	2.49.20	12
2.43.24	2.44.40	2.45.52	2.47. 4	2.48.20	2.49.32	2.50.44	2.51.52	2.53. 8	13
2.47.20	2.48.36	2.49.48	2 51. 0	2.52.12	2 53.24	2.54.36	2.55.44	2.56.56	14
2.51.20	2.52.32	2.53.44	2.54.56	2.56. 8	2.57.16	2.58.28	2.59.36	3. 0.44	15
2.55.16	2.56.28	2.57.40	2.58.52	3. 0. 0	3. 1. 8	3. 2.20	3. 3.24	3. 4.32	16
2.59.16	3. 0.24	3. 1.36	3. 2.48	3. 3.56	3. 5. 0	3. 6.12	3. 7.16	3. 8.24	17
3. 3.16	3. 4.24	3. 5.32	3. 6.44	3. 7.52	3. 8.56	3.10 4	3.11. 8	3.12.16	18
3. 7.16	3. 8.24	3. 9.32	3.10.40	3.11.48	3.12.52	3.13.56	3.15. 0	3.16. 8	19
3.11.16	3.12.24	3.13.36	3.14 36	3.15.44	3.16.4[illegible]	3.17.52	3.18.52	3.20. 0	20
3.15.20	3.16.24	3.17.32	3.18.36	3.19.40	3.20.44	3.21.48	3.22.48	2.23.51	21
3.19.20	3.20.24	3.21.32	3.22.32	3.23.36	3.24.40	3.25.40	3.26 40	3.27.44	22
3.23.24	3.24.24	3.25.32	3.25.32	3.27.32	3.28.36	3.29.36	3.30.32	3.31.35	23
3.27.28	3.28.28	3.29.32	3.30.32	3.31.32	3.32.32	3.33.32	3.34.28	3.35.28	24
3.31.32	3.32.32	3.33.36	3.34.32	3.35.32	3.36.32	3.37.28	3.38.24	3.39.20	25
3.35.40	3.36.36	3.37.36	3.38.32	3.39.32	3.40.28	3.41.24	3.42.20	3.43.12	26
3.39.48	3.40.44	3.41.40	3.42.36	3.43.32	3.44.28	3.45 24	3.46.16	3.47. 8	27
3.43.52	3.44.48	3.45 44	3.46.40	3.47.36	3.48.28	3.49.20	3.50.12	3.51. 4	28
3.48. 0	3.48.52	3.49 48	3.50.44	3.51.36	3.52.28	3.53.20	3.54. 8	3.55. 0	29
3.52. 8	3.53. 0	3.53.56	3.54.48	3.55.40	3.56.28	3.57.20	3.58. 8	3.59. 0	30

Tabu-

Tabula Cęli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	♊
3.52. 8	3.53. 0	3.53.56	3.54.48	3.55.40	3.56.28	3.57. 0	3.58. 8	3.59. 0	0
3.56.16	3.57. 8	3.58. 8	3.58.52	3.59.40	4. 0.28	4. 1.20	4. 2.28	4. 2.56	1
4. 0.24	4. 1.16	4. 2. 4	4. 2.56	4. 3.40	4. 4.32	4. 5.20	4. 6. 8	4. 6.56	2
4. 4.24	4. 5.24	4. 6.12	4 7. 4	4. 7.48	4. 8.36	4. 9.24	4.10. 8	4.10.52	3
4. 8.44	4. 9.32	4.10.20	4.11.12	4.12.52	4.12.36	4.13.24	4.14. 8	4.14.52	4
4.12.56	4.13.40	4.14.28	4.15.20	4.15.56	4.16.40	4.17.24	4.18. 8	4.18.48	5
4.17. 8	4.17.52	4.18.36	4.19.28	4.20. 4	4.20.44	4.21.24	4.22. 8	4 22.48	6
4.21.20	4.22. 4	4.22.24	4.23.36	4.24.48	4.24.48	4.25.28	4.26. 8	4.26.48	7
4.25.32	4.26.16	4.26 56	4.27.44	4.28.16	4.28.52	4.29 32	4.30.12	4.30.48	8
4.29.48	4.30.28	4.31. 8	4.31.52	4.32.24	4.33. 0	4 33.35	4 34.12	4.34.48	9
4.34. 0	4.34.40	4.35.16	4.35.56	4.36.28	4.37. 4	4.37.40	4.38.12	4.38.48	10
4.38.16	4.38.52	4.39.28	4.40. 4	4.40.36	4.41. 8	4.41.44	4.42.16	4.42.52	11
4.48.32	4.43.52	4.43.40	4.44.12	4.44.44	4.45.16	4.45.48	4.46.20	4.46.52	12
4.46.48	4.47.16	4.47.52	4.48.20	4.48.52	4.49.24	4.49.52	4.50.24	4.50.56	13
4.51. 4	4.51.32	4.52. 4	4 52.32	4.53. 0	4.53.32	4.54. 0	4.54.28	4.54.56	14
4.55.20	4.55.48	4.56.16	4.56.44	4.57.12	4.57.40	4.58. 8	4.58.32	4.59. 0	15
4.59.36	5. 0. 4	5. 0.28	5. 0.56	5. 1.20	5. 1.48	5. 2.12	5. 2.36	5. 3. 4	16
5. 3.52	5. 4.20	5. 4.44	5. 5. 8	5. 5.32	5. 5.56	5. 6.20	5. 6.40	5. 7. 4	17
5. 8.12	5. 8.36	5. 9. 0	5. 9 20	5. 9.44	5.10. 4	5.10.28	5.10.48	5.11. 8	18
5.12.28	5.12.52	5.13.12	5.13.32	5.13.52	5.14.12	5.14.32	5.14.52	5.15.12	19
5.16.48	5.17 48	5.17.24	5.17.42	5.18. 4	5 18 20	5.18.40	5.18.56	5.19.10	20
5.21. 8	5 21.24	5.21.40	5.21.56	5.22.16	5.22.32	5.22.48	5.23. 4	5.23.20	21
5.25.24	5.25.40	5.25.52	5.26. 8	5.26.24	5 26 40	5.26.56	5.27. 8	5.27.24	22
5.29.40	5.29.56	5.30. 8	5.30.20	5.30.36	5.30.48	5.31. 4	5.31.12	5.31.28	23
5.34 0	5.34.12	5.34.24	5.34.36	5.34.48	5.35. 0	5.35.12	5.35.20	5.35.32	24
5.38.20	5.38.28	5.38.48	5.38.48	5.39. 0	5 39. 8	5.39.20	5.39.24	5.39.36	25
5.42.40	5.42.34	5.42.56	5.43. 0	5.43.22	5.43.16	5.43.28	5.45.32	5.43.40	26
5.47. 0	5.47. 4	5.47.12	5.47.16	5.42.24	5.47.28	5.47.36	5.47.40	5.47.44	27
5.51.20	5.51.20	5.51.28	5.51.28	5.51.36	5.51.36	5.51.44	5.51.44	5.51.48	28
5.55.40	5.55.40	5 55.44	5.55.44	5.55.48	5.55.48	5.55.52	5.55.52	5.55.56	29
5. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0 0	6. 0. 0	6. 0. 0	6. 0. 0	30

Tabu-

Tabula Cęli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♋	H.M.S.	H.M.S.	H.M.S.	H.M.S.	H.M.S.	H.M.S.	H.M.S.	H.M.S.	H.M.S.
0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0
1	6. 4.24	6. 4.28	6. 4.28	6. 4.32	6. 4.36	6. 4.36	6. 4.36	6. 4.40	6. 4.40
2	6. 8.48	6. 8.56	6. 8.56	6. 9. 4	6. 8.24	6. 9.12	6. 9.12	6. 9.20	6. 9.20
3	6.13.12	6.13.20	6.13.24	6.13.32	6.12.36	6.13.44	6.13.48	6.13.56	6.14. 4
4	6.17.36	6.17.48	6.17.52	6.18. 4	6.16.48	6.18.20	6.18.24	6.18.36	6.18.44
5	6.22. 0	9.22.12	6.22.20	6.22.32	6.21. 0	6.22.52	6.23. 0	6.23.16	6.23.24
6	6.26.24	6.26.36	6.26.48	6.27. 0	6.25.12	6.27.24	6.27.36	6.27.52	6.28. 4
7	6.30.48	6.31. 0	6.31.16	6.31.28	6.29.24	6.32. 0	6.32.12	6.32.32	6.32.44
8	6.35. 8	6.35.24	6.35.40	6.35.56	6.33.26	6.36.32	6.36.48	6.37. 8	6.37.24
9	6.39.28	6.39.48	6.40. 4	6.40.24	6.37.44	6.41. 4	6.41.24	6.41.44	6.42. 4
10	6.43.52	6.44.12	6.44.32	6.44.52	6.41.56	6.45.36	6.46. 0	6.46.20	6.46.44
11	6.48.12	6.48.36	6.49. 0	6.49.24	6.46. 8	6.50. 8	6.50.32	6.50.56	6.51.24
12	6.52.36	6.53. 0	6.53.24	6.53.48	6.50.16	6.54.40	6.55. 4	6.55.32	6.56. 0
13	6.56.56	6.57.24	6.57.48	6.58.16	6.54.28	6.59.12	6.59.40	7. 0. 8	7. 0.40
14	7. 1.16	7. 1.48	7. 2.12	7. 2.44	6.58.40	7. 3.44	7. 4.12	7. 4.44	7. 5.16
15	7. 5.36	7. 6. 8	7. 6.36	7. 7. 0	7. 2.48	7. 8.12	7. 8.44	7. 9.16	7. 9.52
16	7. 9.56	7.10.32	7.11. 0	7.11.36	7. 7. 0	7.12.44	7.13.16	7.13.52	7.14.28
17	7.14.16	7.14.52	7.15.24	7.16. 0	7.11. 8	7.17.12	7.17.48	7.18.24	7.19. 4
18	7.18.36	7.19.12	7.19.48	7.20.24	7.15.16	7.21.40	7.22.16	7.22.56	7.23.40
19	7.22.56	7.23.32	7.24.12	7.24.48	7.19.24	7.26. 8	7.26.48	7.27.28	7.28.12
20	7.27.16	7.27.52	7.28.32	7.29.12	7.23.32	7.30.36	7.31.20	7.32. 0	7.32.44
21	7.31.32	7.32.12	7.32.52	7.33.36	7.27.36	7.35. 4	7.35.48	7.36.32	7.37.16
22	7.35.48	7.36.32	7.37.12	7.38. 0	7.31.44	7.39.28	7.40.16	7.41. 0	7.41.48
23	7.40. 4	7.40.52	7.41.32	7.42.20	7.35.52	7.43.52	7.44.40	7.45.28	7.46.20
24	7.44.20	7.45. 8	7.45.52	7.46.40	7.39.56	7.48.16	7.49. 4	7.49.56	7.50.48
25	7.48.36	7.49.24	7.50.12	7.51. 0	7.44. 4	7.52.40	7.53.3	7.54.24	7.55.16
26	7.52.52	7.53.40	7.54.32	7.55.20	7.48. 8	7.57. 4	7.57.36	7.58.52	7.59.44
27	7.57. 4	7.57.56	7.58.48	7.59.40	7.52.12	8. 1.28	8. 2.20	8. 3.16	8. 4.12
28	8. 1.16	8. 2.12	8. 3. 4	8. 3.56	7.56.16	8. 5.48	8. 6.44	8. 7.40	8. 8.40
29	8. 5.28	8. 6.24	8. 7.20	8. 8.12	8. 0.20	8.10. 8	8.11. 8	8.12. 4	8.13. 4
30	8. 9.40	8.10.36	8.11.32	8.12.28	8. 4.20	8.14.28	8.15.28	8.16.28	8.17.28

Tabu-

Tabula Cœli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	♋
6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	6. 0. 0	0
6. 4.20	6. 4.20	6. 4.16	6. 4.16	6. 4.12	6. 4.12	6. 4. 8	6. 4. 8	6. 4. 4	1
6. 8.40	6. 8.40	6. 8.32	6. 8.32	6. 8.24	6. 8.24	6. 8.16	6. 8.16	6. 8.12	2
6.13. 0	6.12.56	6.12.48	6.12.44	6.12.36	6.12.32	6.12.24	6.12.20	6.12.16	3
6.17.20	6.17.16	6.17. 4	6.17. 0	6.16.48	6.16.44	6.16.32	6.16.28	6.16.20	4
6.21.40	6.21.32	6 21.20	6.21.12	6.21. 0	6.20.52	6.20.40	6.20.36	6.20.24	5
6.26. 0	6.25.48	6.25.36	6.25.24	6.25.12	6.25. 0	6.24.48	6.24.40	6.24.28	6
6.30.20	6.30. 4	9.29.52	6.29.40	6.29.24	6.29.12	6.28.56	6.28.48	6.28.32	7
6.34.36	6.34.20	6.34. 8	6.33.52	6.33.56	6.33.20	6.33. 4	6.32.52	6.32.36	8
6.38.52	6.38.36	6.38.20	6.38. 4	6.37.44	6.37.28	6.37.12	6.36.56	6.36.40	9
6.43 12	6.42.52	6.42.36	6.42.16	6.41.50	6.41.40	6.41.20	6.41. 4	6.40.44	10
6.47.32	6.47. 8	6.46.48	6.46.28	6.46. 8	6.45.48	6.45.28	6.45. 8	6.44.48	11
6.51.48	6.51.24	6.51. 0	6.50.40	6.50.16	6.49.56	6.49.32	6.49.12	6.48.52	12
6.56. 8	6.55.40	6.55.16	6.54.52	6.54.28	6.54. 4	6.53.40	6.53.20	6.52.56	13
7. 0.24	6 59.56	6.59.32	6.59. 4	6.58.40	6.58.12	6.57.48	6.57.24	6.56.56	14
7. 4.40	7. 4.12	7. 3.44	7. 3.16	7. 2.48	7. 2.20	7. 1.52	7 1.28	7. 1. 0	15
7. 8.56	7. 8.28	7. 7.56	7. 7.28	7. 7. 0	7. 6.28	7. 6. 0	7. 5.32	7. 5. 4	16
7.13.12	7.12.44	7.12. 8	7.11.40	7.11. 8	7.10.36	7.10. 8	7. 9.36	7. 9. 4	17
7.17.28	7.16.56	7.16.20	7.15.48	7.15.16	7.14.44	7.14.12	7.13.40	7.13. 8	18
7 21.44	7.21. 8	7.20.52	7.19.56	7.19.24	7.18.52	7.18.16	7.17.44	7.17. 8	19
7.26. 0	7.25.20	7.24.44	7.24. 4	7.23.32	7.22.56	7.22.20	7.21.48	7.21.12	20
7.30.12	7.29 32	7.28.52	7.28. 8	7.27.36	7.27. 0	7.26.24	7.25.48	7.25.12	21
7.34.28	7.33.44	7.33. 4	7.32.16	7.31.44	7.31. 8	7.30.28	7.29.48	7.29.12	22
7.38.4	7.37.56	7.37.16	7.36.24	7.35.52	7.35.12	7.34.32	7.33.52	7.33.12	23
7.42.52	7.42. 8	7.41.24	7.40.32	7.39.56	7.39.16	7.38.32	7.37.52	7.37.12	24
7.47 4	7.46.20	7.45.32	7.44.40	7.44. 4	7.43.20	7.42.36	7.41.52	7.41.12	25
7.51.16	7.50.28	7 49.40	7.48.48	7.48. 8	7.47.24	7.46.36	7.45.52	7.45. 8	26
7.55.24	7.54.36	7.53 48	7 52.56	7.52.12	7 51.24	7.50.36	7.49.52	7.49. 8	27
7.59.36	7.58.44	7 57.56	7.57. 4	7.56.16	7.55.28	7.54.40	7.53.52	7.53. 4	28
8. 3.44	8. 2.52	8. 2. 0	8. 1. 8	8. 0.20	7.59.32	7.58.40	7.57.52	7.57. 4	29
8. 7.52	8. 7. 0	8. 6. 4	8. 5.12	8. 4.20	8. 3 32	8. 2.40	8. 1.52	8. 1. 0	30

Tabu-

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Tabula Cęli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♌	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
0	8. 9.40	8. 10.36	8. 11.32	8. 12.28	8. 13.28	8. 14.28	8. 15.28	8. 16.48	8. 17.28
1	8. 13.52	8. 14.48	8. 15.48	8. 16.44	8. 17.44	8. 18.48	8. 19.48	8. 20.48	8. 21.52
2	8. 18. 4	8. 19.20	8. 20. 0	8. 21. 0	8. 22. 0	8. 23. 4	8. 24. 8	8. 25. 8	8. 26.16
3	8. 22.12	8. 23.12	8. 24.12	8. 25.12	8. 26.16	8. 27.20	8. 28.24	8. 29.28	8. 30.36
4	8. 26.24	8. 27.24	8. 28.24	8. 29.28	8. 30.32	8. 31.36	8. 32.44	8. 33.48	8. 34.56
5	8. 30.32	8. 31.36	8. 32.36	8. 33.40	8. 34.48	8. 35.52	8. 37. 0	8. 38. 8	8. 39.16
6	8. 34.49	8. 35.41	8. 36.48	8. 37.52	8. 39. 0	8. 40. 8	8. 41.16	8. 42.24	8. 43.36
7	8. 38.48	8. 39.52	8. 40.56	8. 42. 4	8. 43.12	8. 44.20	8. 45.32	8. 46.40	8. 47.52
8	8. 42.52	8. 44. 0	8. 45. 4	8. 46.12	8. 47.24	8. 48.32	8. 49.44	8. 50.56	8. 52. 8
9	8. 46.56	8. 48. 0	8. 49.12	8. 50.20	8 51.32	8. 52.44	8. 53.56	8. 55. 8	8. 56.24
10	8. 51. 0	8. 52. 8	8. 53.20	8. 54.28	8. 55.40	8. 55.56	8. 58. 8	8. 59.20	9. 0.36
11	8. 55. 4	8. 56.12	8. 57.24	8. 58.36	8. 59.48	9. 1. 4	9. 2.20	9. 3.32	9. 4.48
12	8. 59. 4	9. 0.16	9. 1.28	9. 2.40	9. 3.56	9. 5.12	9. 6.28	9. 7.44	9. 9. 0
13	9. 3. 8	9. 4.20	9. 5.32	9. 6.44	9. 8. 0	9. 9.20	9. 10.36	9. 11.52	9. 13.12
14	9. 7. 8	9. 8.24	9. 9.36	9. 10.48	9 12. 4	9. 13.24	9 14.44	9. 16. 0	9. 17.24
15	9. 11. 8	9. 12.24	9. 13.36	9. 14.52	9. 16. 8	9. 17.28	9. 18.48	9. 20. 8	9. 21.32
16	9. 15. 8	9. 16.24	9. 17.40	9. 18.56	9. 20.12	9. 21.36	9. 22.56	9. 24.16	9. 25.40
17	9. 19. 8	9. 20.24	9 21.40	9. 23. 0	9. 24.16	9. 25.40	9. 27. 0	9. 28.24	9. 29.48
18	9. 23. 8	9. 24.24	9. 25.40	9. 27. 0	9. 28.20	9. 29.44	9. 31. 4	9. 32.28	9. 33.52
19	9. 27. 4	9: 28.24	9. 29.49	9. 31. 0	9. 32.24	9. 33.48	9. 35. 8	9. 36.32	9. 37.56
20	9. 31. 0	9. 32.20	9. 33.40	9. 35. 0	9. 36.24	9. 37.48	9. 39.12	9. 40.36	9. 42. 0
21	9. 34.56	9. 36.16	9. 37.36	9. 39. 0	9. 40.24	9. 41 48	9. 43.12	9. 44.36	9. 46. 4
22	9. 38.52	9. 40.12	9. 41.36	9. 43. 0	9. 44.24	9. 45.48	9. 47.12	9. 48.40	9. 50. 8
23	9. 42.48	9. 44. 8	9. 45.32	9. 46.56	9. 48.20	9. 49.48	9. 51.12	9. 52.40	9. 54. 8
24	9. 46.40	9. 48. 4	9. 49.28	9. 50.52	9. 52.16	9. 53.44	9. 55.12	9. 56.40	9. 58. 8
25	9. 50.36	9. 52. 0	9. 53.24	9. 54 48	9. 56.12	9. 57.40	9. 59. 8	10. 0.40	10. 2. 8
26	9. 54.28	9. 55.52	9. 57.16	9. 58.44	10. 0. 8	10. 1.35	10. 3. 4	10. 4. 6	10. 6. 8
27	9. 58.20	9. 59.44	10. 1. 8	10. 2.36	10. 4 4	10. 5.32	10. 7. 0	10. 8.32	10.10. 4
28	10. 2.12	10. 3.36	10. 5. 0	10. 6.28	10. 7.56	10. 9.28	10.10.56	10.12.28	10.14. 0
29	10. 6. 0	10. 7.28	10. 8.52	10.10.20	10.11.48	10.13.20	10.14.52	10.10.24	10.17.56
30	10. 9.48	10.11.16	10.10.40	10.14.12	10.15.36	10.17.12	10.18.44	10.20.16	10.21.52

Taba-

Tabula Cœli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	Ω.
8. 7.52	8. 7. 0	8. 6. 4	8. 5.12	8. 4.20	8. 3.32	8. 2.40	8. 1.52	8. 1. 0	0
8. 12. 0	8. 11. 8	8. 10.12	8. 9.16	8. 8.24	8. 7.32	8. 6.40	8. 5.52	8. 5. 0	1
8. 16. 8	8. 15.12	8. 14.16	8. 13.20	8. 12.24	8. 11.32	8. 10.40	8. 9.48	8. 8.56	2
8. 20.12	8. 19.16	8. 18.20	8. 17.24	8. 16.28	8. 15.32	8. 14.36	8. 13.44	8. 12.52	3
8. 24.20	8. 23.24	8. 22.24	8. 21.28	8. 20.28	8. 19.32	8. 18.36	8. 17.40	8. 16.48	4
8. 28.28	8. 27.28	8. 26.24	8. 25.28	8. 24.28	8. 23.28	8. 22.32	8. 21.36	8. 20.40	5
8. 32 32	8. 31.32	8. 30.28	8. 29.28	8. 28.28	8. 27.28	8. 26.28	8. 25.32	8. 24.32	6
8. 36.36	8. 35.36	8. 34.28	8. 33.28	8. 32.28	8. 31.24	8. 30.24	8. 29.28	8. 28.24	7
8. 40.40	8. 39.36	8. 38.28	8. 37.28	8. 36.24	8. 35.20	8. 34.20	8. 33.20	8. 32.16	8
8. 44.40	8. 43.36	8. 42. 8	8. 41.24	8. 40.20	8. 39.19	8. 38.12	8. 37.21	8. 36.18	9
8. 48.44	8. 47.36	8. 46.28	8. 45.24	8. 44.16	8. 43.12	8. 42. 8	8. 41. 8	8. 40. 0	10
8. 52.44	8. 51. 6	8. 50.28	8. 49.20	8. 48.12	8. 47. 8	8. 46. 4	8. 45. 0	8. 43.52	11
8. 56.44	8. 55 36	8. 54.28	8. 53.16	8. 52. 8	8. 51. 4	8. 49.56	8. 48.52	8. 47.44	12
9. 0.44	8. 59.36	8. 58.24	8. 57 12	8. 56. 4	8. 55. 0	8. 53.48	8. 52.44	8. 51.36	13
9. 4.44	9. 3.32	9. 1.20	9. 1. 8	9. 0. 0	8. 58.52	8. 57.40	8. 56.36	8. 55.28	14
9. 8.40	9. 7.28	9. 6.16	9. 5. 4	9. 3.52	9. 2.44	9. 1.32	9. 0.24	8. 59.16	15
9. 12.40	9. 11.24	9. 10.12	9. 9. 0	9. 7.48	9. 6.36	9. 5.24	9. 4.16	9. 3. 4	16
9. 16.36	9. 15.20	9. 14. 8	9. 12.56	9. 11.40	9. 10. 8	9. 9.16	9. 8. 8	9. 6.52	17
9. 20.32	9. 19.16	9. 18. 0	9. 16.48	9. 15.32	9. 14.20	9. 13. 3	9. 11.56	9. 10 40	18
9. 24.28	9. 23.12	9. 21.56	9. 20.40	9. 19.24	9. 18.12	9. 17. 0	9. 15.44	9. 14.28	19
9. 28.24	9. 27. 8	9. 25.48	9. 24.32	9. 23.16	9. 22. 4	9. 20.48	9. 19.32	9. 18.16	20
9. 32.16	9. 31. 0	9. 29.40	9. 28.24	9. 27. 8	9. 25.52	9. 24. 6	9. 23.20	9. 22. 4	21
9. 36.12	9. 34.52	9. 33.32	9. 32.16	9. 31. 0	9. 29.40	9. 28.24	9. 27. 8	9. 25.52	26
9. 40. 4	9. 38.44	9. 37.24	9. 36. 8	9. 34.48	9. 33.28	9. 32.12	9. 30.56	9. 29.40	23
9. 43.56	9. 42.36	9. 41.16	9. 39.50	9. 38.36	9. 37.10	9. 35.56	9. 34.40	9. 33.24	24
9. 47. 8	9. 46.28	9. 45. 8	9. 43.44	9. 42.24	9. 41.49	9. 39.44	9. 38.28	9. 37. 8	25
9. 51,40	9. 50.20	9. 48.56	9. 47.32	9. 46.12	9. 44.52	9. 43.52	9. 42.12	9. 40.52	26
9. 55.32	9. 54. 8	9. 52 44	9. 51.20	9. 49.56	9. 48.36	9. 47.16	9. 45.56	9. 44.36	27
9. 59.20	9. 57.56	9. 56.32	9. 55. 8	9. 53.44	9. 52.24	9. 51. 4	9. 49.40	9. 48.20	28
10. 3. 8	10. 1.44	10. 0.20	9. 58.56	9. 57.32	9. 56.12	9. 54.48	9. 52.24	9. 52. 4	20
10. 6.56	10. 5.32	10. 4. 8	10. 2.44	10. 1.20	9. 59.56	9. 58.32	9. 57. 8	9. 55.44	30

Tabu-

Tabula Cœli Mediationum.

Latitudo Septemtrionalis.

♍	1 H.I.II.	2 H.I.II.	3 H.I.II.	4 H.I.II.	5 H.I.II.	6 H.I.II.	7 H.I.II.	8 H.I.II.	9 H.II.I.
0	10. 9.48	10.11.16	10.12.40	10.14.12	10.15.36	10.17 12	10.18.44	10.20.16	10.21.52
1	10.13.40	10.15. 8	10.16.32	10.18. 4	10 19.32	10.21. 4	10.22.36	10.24.12	10.25.48
2	10.17.28	10.18.56	10 20.24	10.21.56	10.23.24	10.24.56	10.26.28	10.28. 4	10.29.40
3	10.21.16	10.22.24	10.24.12	10.25.44	10.27.16	10.28.48	10.30.20	10.31.56	10.33.32
4	10.25. 4	10.26.36	10.28. 4	10.29.36	10.31. 8	10.32.40	10.34.12	10.35.48	10.37.24
5	10.28.52	10.30.24	10.31.52	10.33.24	10.34.56	10.36.32	10.38. 4	10.39.40	10.41.16
6	10.32.40	10.34.12	10.35.40	10.37.12	10.38.44	10.40.20	10.41.52	10.43.28	10.45. 4
7	10.36. 8	10.38. 0	10.39.28	10.41. 0	10.42.32	10.44. 8	10.45.40	10.47.16	10.48.52
8	10.40.16	10.41.48	10.43.16	10.44.48	10.46.20	10.47.56	10.49.28	10.51. 4	10.52.40
9	10.44. 0	10.45.32	10.47. 4	10.48.36	10.50. 8	10.51.44	10.53.16	10.54.52	10.56.28
10	10.47.44	10.49.16	10.50.48	10.52.24	10.53.56	10.55.32	10.57. 4	10.58.40	11. 0.16
11	10.51.28	10.53. 0	10.54.32	10.56. 8	10.57.40	10.59.16	11. 0.52	11. 2. 8	11. 4. 4
12	10.52.12	10.56.44	10.58.16	10.59.52	11. 1.24	11. 3. 0	11. 4.36	11. 6. 2	11. 7.48
13	10.58.56	11. 0.28	11. 2. 0	11. 3.36	11. 5.12	11. 6.48	11. 8 24	11.10. 0	11.11.36
14	11 2.40	11. 4.12	11. 5 44	11. 7.20	11. 8.56	11.10.32	11.12. 8	11.13.44	11.15.10
15	11. 6.28	11. 7.56	11. 9.28	11.11. 4	11.12.40	11.14.16	11.15.52	11.17. 8	11.19. 4
16	11.10. 4	11.11.40	11.13.12	11.14.48	11.16.24	11.18. 0	11.19.36	11.23.12	11.22.48
17	11.13.48	11.15.24	11.16.56	11.18.32	11.20. 8	11.21.44	11.23.20	11.24.56	11.26.32
18	11.17.28	11.19. 4	11.20.36	11.22.12	11.23.48	11.25.24	11.27. 0	11.28.36	11.30.12
19	11.21.12	11.22.48	11.24.20	11.25.56	11.27.32	11.29. 8	11.30.44	11.32.20	11.33.56
20	11.24.52	11.26.28	11.28. 4	11.29.40	11.31.16	11.32.52	11.34.28	11.36. 0	11.37.36
21	11.28.32	11.30. 8	11.31.44	11.33.20	11.34.56	11.36.32	11.38. 8	11.39.40	11.41.16
22	11.32.12	11.33.48	11.35.24	11.37. 0	11.38.36	11.40.12	11.41.28	11.43.20	11.44.56
23	11.35.52	11.37.28	11.39. 4	11.40.40	11.42.16	11.43.52	11.45.28	11.47. 4	11.48.40
24	11.39.32	11.41. 8	11.42.44	11.44.20	11.45 56	11.47.32	11.49. 8	11.50.44	11.52.20
25	11.43. 2	11.44.48	11.46.24	11.48. 0	11.49.36	11.51.12	11.52.48	11.54.24	11.56. 0
26	11.46.52	11.48.28	11.50. 4	11.51.40	11.53.16	11.54.52	11.56.18	11.58. 4	11.59.40
27	11.5032	11.52. 8	11.53.44	11.55.40	11.56.56	11.58.32	12. 0. 8	12. 2.44	12. 3 20
28	11.54.12	11.55.48	11.57.24	11.59. 0	12. 0.36	12. 2.12	12. 3.48	12. 5.28	12. 7. 4
29	11.57.52	11.59.28	12. 1. 4	12. 2.40	12. 4.16	12. 5.52	12. 7.28	12. 9. 8	12.10.44
30	12. 1.32	12. 4.44	12. 4.44	12. 6.20	12. 7.56	12. 9.32	12.11. 8	12.12.48	12.14.24

Tabu-

Tabula Cęli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	♍
10. 6.56	10. 5.32	10. 4. 8	10. 2.44	10. 1.20	9. 59.56	9. 58.32	9. 57. 8	9. 55.44	0
10.10.44	10. 9.20	10. 7.56	10. 6.32	10. 5. 4	10. 3.40	10. 2.16	10. 0.52	9. 59.28	1
10.14.32	10.13. 8	10.11.40	10.10.16	10. 8.48	10. 7.24	10. 6. 0	10. 4.36	10. 3.12	2
10.18.20	10 16.52	10.15.24	10.14. 0	10.12.32	10 11. 8	10. 9.40	10. 8.16	10. 6.52	3
10.22. 8	10.20.40	10.19.12	10.17.44	10.16.16	10.14.52	10.13.24	10.12. 0	10.10.36	4
10.25.56	10.24.28	10.22.56	10.21.28	10.20. 0	10.18.36	10.17. 8	10.15.40	10.14.16	5
10.29.40	10.28.12	10.26.40	10 25.12	10.23.44	10.22.16	10.20.48	10.19.20	10.17.56	6
10.33.28	10.31.56	10.30.24	10.28.56	10.27.28	10.26. 0	10 24.32	10.23. 4	10.21.36	7
10.37.12	10.35.40	10.34. 8	10.32.40	10.31.12	10.29.44	10.28.12	10.26.44	10.25.16	8
10.40.56	10.39.24	10.37.52	10.36.24	10.34.52	10.33.24	10.31.52	10.30.24	10.28.56	9
10.44.40	10.43. 8	10.41.56	10.40. 8	10.38.36	10.37. 8	10.35.36	10.34. 4	10.32.36	10
10.48.24	10.46.52	10.45.20	10.43.52	10.42.20	10.40.48	10.39.16	10.37.44	10.36.16	11
10.52. 8	10.50.56	10.49. 4	10.47.32	10.46. 0	10.44.28	10.42.56	10.41.24	10.39.56	12
10.55.52	10.54.20	10.52.48	10 51.16	10.49.40	10.48. 8	10.46.36	10.45. 4	10.43.36	13
10.57.12	10.58. 0	10.56.28	10.54.56	10.53.20	10.51.48	10.50.16	10.48.44	10.47.12	14
11. 3.12	11. 1. 4	11. 0. 8	10.58.36	10.57 0	10.55.28	10.53.56	10.52.24	10.50.52	16
11. 6.56	11. 5.24	11. 3.48	11. 2.16	11. 0.40	10.59. 8	10.57.36	10.56. 4	10.54.32	16
11.10.40	11. 9. 3	11. 7.28	11. 5.56	11. 4.20	11. 2.48	11. 1.16	10.59.44	10.58.12	17
11.14.20	11.12.48	11.11. 8	11. 9.36	11. 8. 0	11. 6 28	11. 4.52	11. 3.24	11. 1.48	19
11.18. 4	11.16.28	11.14.52	11.13.16	11.11.40	11.10. 8	11. 8.32	11. 7. 4	11. 5.28	20
11.21.44	11.20. 8	11.18.32	11 16.56	11.15.20	11.13.48	11.12.12	11.10 44	11. 9. 8	20
11.25.24	11.23.48	11.22.12	11 20.36	11.19. 0	11.17.28	11.15.52	11.14.20	11.12.44	21
11.29. 4	11.27.28	11.25.52	11.24.16	11.23.40	11 21. 8	11.19.32	11.18. 0	11.16.24	22
11.32.44	11.31. 9	11.29.32	11.27.56	11.26.20	11 24.48	11.23.12	11.21.40	11.20. 4	23
11.36.24	11.34.48	11.33.12	11.31.36	11.30. 0	11.28.28	11.26.52	11.25.20	11.23.44	24
11.40. 8	11.38.32	11.36.56	11.35.20	11.33 44	11.32. 8	11:30.32	11.29. 0	11.27.20	25
11.43.48	11.42.12	11.40.36	11.39. 9	11.37.24	11.35.48	11 34.12	11.32.40	11.31. 0	26
11.47.28	11.45.52	11.44.16	11.42.40	11.41. 4	11.39.28	11.37.52	11.36.16	11.35.36	27
11.51. 8	11.49.12	11.47.56	11.46.20	11.44.44	11.43. 8	11.41 32	11.39.56	11.38.16	28
11.54.48	11.53.12	11.51.36	11.50. 0	11.48.24	11.46.48	11.45.12	11.43.36	11.41.56	26
11.58.28	11.56.52	11.55.16	11.53.40	11.52. 4	11 50.28	11.48.52	11.47.12	11 45.32	30

Tabu-

Tabula Cœli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♎	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*
0	12. 1.32	12. 3. 8	12. 4.44	12. 6.20	12. 7.56	12. 9.32	12.11. 8	12.12.48	12.14.24
1	12. 5.12	12. 6.48	12. 8.24	12 10. 0	12.11.36	12.13.12	12.14 48	12.16.24	12.18. 4
2	12. 8.52	12.10.28	12.12. 4	12.13.40	12.15.16	12.16.52	12.18.28	12.20. 4	12.21.44
3	12.12.32	12.14. 8	12.15.44	12.17.20	12.18.56	12.20.32	12.22. 8	12.23.44	12.25.24
4	12.16.12	12.17.48	12.19.24	12.21. 0	12.22.36	12.24.12	12.23.48	12.27.20	12.29. 0
5	12.19.52	12.21.28	12.23. 4	12.24.40	12.26.16	12.27.52	12.29.28	12.31. 0	12.32.40
6	12.23.36	12.25.12	12.26.48	12.28.24	12.30. 0	12.31.32	12.33. 8	12.34.40	12.36.16
7	12.27.16	12.28.52	12.30.28	12.32. 4	12.33.40	12.35. 2	12.36.48	12.38.20	12.39.56
8	12.30.56	12.32.32	12.34. 8	12.35 44	12.37.20	12. 38.52	12.40.28	12.42. 0	12.43.36
9	12.34.26	12.36.12	12.37.48	12.39.24	12.41. 0	12.42.32	12.44. 8	12.45.40	12.47.16
10	12.38.16	12.39.52	12.41.28	12.43. 4	12.44.40	12.46.12	12.47.48	12.49.16	12 50.52
11	12.42 56	12.43.32	12.45. 0	12.46.44	12.48.20	12.49.52	12.51.28	12 52.56	12.54.32
12	12.45.40	12.47.12	12.48.52	12.50.24	12.52. 0	12.53.32	12.55. 8	12.56.36	12.58.12
13	12.49.20	12.50.52	12.52.32	12.54. 4	12.55.40	12.57.12	12.58.44	13. 0.16	13. 1.48
14	12.53. 4	12.54.36	12.56.12	12.57.44	12.59.20	13. 0.52	13. 2.24	13. 3.56	13. 5.28
15	12.56.48	12.58.20	12.59.52	13. 1.24	13. 3. 0	13. 4.32	13. 6. 4	13. 7.36	13. 9. 8
16	13. 0.28	13. 2. 0	13. 3.32	13. 5. 4	13. 6.40	13. 8.12	13. 9.44	13.11.16	13.12.48
17	13. 4. 8	13. 5.40	13. 7.12	13. 8.44	13.10.20	13.11.52	13.13.24	13.14.56	13.16.24
18	13. 7.52	13. 9.21	13.10.56	13.12.28	13.14. 0	13.15.32	13.17. 4	13 18.36	13.20. 4
19	13.11.36	13.13. 8	13.14.40	13.16. 8	13.17.40	13.19.12	13.20.44	13.22.16	13.23.44
20	13.15.20	13.16.52	13.18.24	13.14.52	13.21.24	13.22.52	13.24.24	13.25.56	13.27.24
21	13.19. 4	13.20.36	13.22. 8	13.23.36	13.25. 8	13.26.36	13.28. 8	13.29.36	13.31. 4
22	13.22.48	13.24.20	13.25 52	13.27.20	13.28.48	13.30.16	13.31.48	13.33.16	13.34 44
23	13.26.32	13.28. 4	13.29.36	13.31. 4	13.32.32	13.34. 0	13.35.28	13.36.56	13.38.24
24	13.30.20	13.31.48	13.33.20	13.34.48	13.36.16	13.37.44	13.39.12	13.40.40	13.42. 4
25	13.34. 4	13.35.32	13.37. 4	13.38.32	13.40. 0	13.41.24	13.42.52	13.44.20	13.45.44
26	13.37.52	13.39.20	13.40.48	13.42 16	13.43.44	13.45. 8	13.46.36	13.48. 0	13.49.24
27	13.41 40	13.43. 8	13.44.36	13.46. 0	13.47.28	13.48.5	13.50.20	13.51.44	13.53. 8
28	13.45.28	13.46.52	13.48.20	13.49.44	13.51.22	13.52.36	13.54. 0	13.55.24	13.56.48
29	13.49.16	13.50.40	13.52. 4	13.53.28	13.54.56	13.56.20	13.57.44	13.59 8	14. 0.32
30	13.53. 4	13.54.28	13.55.52	13.57.16	13.58.40	14. 0. 4	14. 1.28	14. 2.52	14. 4.16

Tabu-

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Tabula Cęli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	♎
11.58.28	11.56.52	11.55.16	11.53.40	11.52. 4	11.50.28	11.48.52	11.47.12	11.45.32	0
12. 2. 8	12. 0.32	11.58.56	11.57.20	11.55.44	11.54. 8	11.52.32	11.50.52	11.49.16	1
12. 5.48	12. 4.12	12. 2.36	12. 1. 0	11.59.24	11.57.48	11.56.12	11.54.32	11.52.56	2
12. 9.28	12. 7.52	12. 6.16	12. 4.40	12. 3. 4	12. 1.28	11.59.52	11.58.16	11.56.49	3
12.13. 8	12.11.32	12. 9.56	12. 8.20	12. 6.44	12. 5. 8	12. 3.32	12. 1.56	12. 1.56	4
12.16.48	12.15.12	12:13.36	12.12. 0	12.10.24	12. 8.48	12. 7.12	12. 5.36	12. 5.36	5
12.20.28	12.18.52	12.17 16	12.15.40	12.14. 4	12.12.28	12.10.52	12. 9.16	12. 9.16	6
12.24. 8	12.22.32	12.20.56	12.19.20	12.17.44	12.16. 8	12.14.52	12.12.56	12.12.50	7
12.27.48	12.26.12	12.24.36	12.23. 0	12.21.24	12.19.48	12.18.12	12.16.40	12.15. 4	8
12.31.28	12.29.52	12.28.16	12.26.40	12.25. 4	12.23.38	12.21.52	12.20.20	12.18.44	9
12.35. 8	12.33.32	12.31.56	12.30.20	12.28.44	12.27. 8	12.25.32	12.24. 9	12.22.24	10
12.38.48	12.37.12	12.35.40	12.34. 4	12.32 28	12.30.52	12.29.16	12.27. 40	12.27.40	11
12.42.32	12.40.56	12.39.24	12.37.48	12.36.12	12.34.36	12.53 0	12.31.24	12.29.48	12
12.46.12	12.44.16	12.43. 4	12.41.28	12.39.52	12.38.16	12.36. 4	12.35. 4	12.33.28	13
12 49.56	12.42.20	12.46.48	12.45.12	12.43.56	12.42. 0	12.40.24	12.38.40	12.37.12	14
12.53.32	12.53. 4	12.50.32	12.48.56	12.47.20	12.45.44	12.44. 8	12.42.32	12.40.56	15
12.57.20	12.55.48	12.54.16	12.52.40	12.51. 4	12.49.28	12.47.52	12.46.16	12.44.40	16
13. 1. 4	12.59.32	12.58. 0	12.56.24	12 54.48	12.53.12	12.51.36	12.50. 0	12.48.24	17
13. 4.48	13 3.16	13. 1.44	13. 0. 8	12.58.36	12.57. 0	12.55.24	12.53.48	12.52.12	18
13. 8.32	13. 7. 0	13. 5.28	13. 3.52	12. 2.20	12. 0.44	12.59. 8	12.57.32	12.55.50	19
13.12.16	13.10.44	13. 9.12	13. 7.36	13. 6. 4	13. 4.38	13. 2.56	13. 1.20	12.59.44	20
13.16. 0	13.14.28	13.12.56	13.11.24	13. 9.52	13. 8.16	13. 6.44	13. 5. 8	12. 5.32	21
13.19.44	13.18.12	13.16.44	13.15.12	13.13.40	13.12. 4	13.10.32	13. 8.56	13. 7.20	22
13.23.32	13.28. 0	13.20.32	13.29. 0	13.17.28	13.15.52	13.14.20	13.12.44	13.11. 8	23
13.27.20	13.25.48	13.24.20	13.22 48	13.21.16	13.19.40	13.18. 8	13.16.32	13.14.50	24
13.31. 8	13.29.36	13.28.58	13.26.36	13.25. 4	13.23.28	13 21.56	13.20.20	13.18.44	25
13.34.56	13.33.24	13.31.56	13.30.24	13.28.52	13.27.20	13 25.48	13.24.12	13.22.36	26
13.38.44	13.37.16	13.35.48	13.34.16	13.32.44	13.21.12	13.29.40	13.28. 4	13.26.28	27
13.42.32	13.41. 4	13.39.36	13.38. 4	13 36.36	13.35. 4	13.33.32	13.31.56	13.30.20	28
13.46 20	13.44.52	13.43.24	13.41 56	13.40.28	13.38.36	13.37.24	13.35.48	13.34.12	29
13.50.12	13.48.24	13.47.24	13.49.48	13.44.24	13.42.38	13.41.16	13.39.44	13 38. 8	30

Tabu-

Tabula Cęli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
m	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.II.I.	H.II.I.	H.I.II.
0	13.53. 4	13.54.28	13.55.52	13.58.40	13.58.40	14. 0. 4	14. 1 28	14. 2.52	14. 4.16
1	13.56.52	13.58.16	13.59.40	14. 2.28	14. 2.28	14. 3.48	14. 5.12	14. 6 36	14. 7.56
2	14. 0.40	14. 2. 4	14. 3.28	14. 6.16	14. 6.16	14. 7.36	14. 8.56	14.10.20	14.11.40
3	14. 4.28	14. 5.52	14. 7.16	14.10. 4	14.10. 4	14.11.24	14.12.44	14.14. 4	14.15.24
4	14. 8.20	14. 9.40	14.11. 4	14.12.28	14.13.48	14.15 8	14.16.28	14.17.48	14.19. 8
5	14.12.12	14.13.32	14.14.52	14.16.16	14.17.36	14.18.56	14.20.16	14.21.32	14.22.52
6	14.16. 4	14.17.24	14.18.44	14.20. 4	14.21.34	14.28.44	14.24. 4	14.25.20	14.26.36
7	14.19.56	14.21.56	14.22.32	14.23.52	14.25.12	14.26.32	14.27.48	14.29. 4	14.30.20
8	14.23.48	14.25. 8	14.26.28	14.27.44	14 29. 0	14.30.20	14.31.16	14.32.52	14.34. 8
9	14.27.44	14.29. 0	14.30.20	14.31.36	14.32.52	14.34. 8	14.35.24	14.36.40	14.37.36
10	14.31.36	14.32.52	14.34.12	14.35.28	14.36.44	14.37.56	14.39.12	14.40.28	14.41.44
11	14.35.32	14.36.48	14.38. 4	14.39.20	14.40.36	14.41.48	14.43. 0	14.44.16	14.45.32
12	14.39.28	14.40.44	14.42. 0	14.43.12	14.44.28	14.45.40	14.46.52	14.48. 4	14.49.20
13	14.43.24	14.44 40	14.45.52	14.47. 4	14.48.20	14.49.32	14.50.44	14.51.52	14.53. 8
14	14.47.20	14. 8.36	14.49.48	14.51. 0	14.52.12	14.53.24	24.54.36	14.55.44	14.56.56
15	14.51.20	14.52.32	14.53.44	14.54.56	14.56 8	14.57.16	14.58.28	14.59.36	15. 0.44
16	14.55.16	14.56.28	14.57.40	14.58.52	15. 0. 0	15. 1. 8	15. 2.20	15. 3.24	15. 4.32
17	14.59.16	15. 0.24	15. 1.36	15. 2.48	15 3.56	15. 5. 0	15. 6.12	15. 7.16	15. 8.24
18	15. 3.16	15. 4.24	15. 5.32	15. 6.44	15. 7.52	15. 8.56	15 10. 4	15.11. 8	15.12.16
19	15. 7.16	15. 8.24	15. 9.32	15.10.40	15.11.48	15.12.52	15.13.56	15.15. 0	15.16. 8
20	15.11.16	15.12.24	15.13.32	15.14.36	15.15.44	15.16.48	15.17.52	15.18.52	15.20. 0
21	15.15.20	15.16.24	15.17.32	15.18.35	15.19.40	15.20.44	15.21.48	15.22.48	15.23.52
22	15.19.20	15.20.24	15.21.22	15.22.32	15.23.36	15.24.40	15,25 40	15.26.40	15.27.14
23	15.23.24	15.24.24	15.25.32	15.26.32	15.27.32	15.28.36	15.29,36	15.30.32	15.31.35
24	15.27.28	15.28.28	15.29.32	15.30.32	15.31.32	15:32.3?	15.33.32	15.34.28	15.35.28
25	15.31.32	15.32.32	15.33 36	15.34.32	15.35.52	15.36.32	15.37.28	15.38.24	15 39.20
26	15.35.40	15.36.36	15.37.36	15.38.32	15.39.32	15.40.28	15.41.24	15.42.20	15.43.12
27	15.39.48	15.40.44	15.41.40	15.42.36	15.43.32	15.44.28	15.45.25	15.46.16	15.47. 8
28	15.43.52	15.44.48	15.45.44	15.46.40	15.47.36	15.48.28	15.40.20	15.50.12	15.51. 4
29	15.48. 0	15.48.52	15.49.48	15.50.44	15.51.36	15.52.28	15.53.20	15.54. 8	15.55. 0
30	15.52. 8	15.53. 0	15.53.56	15.54.48	15.55.4	15.56.28	15.57.20	15.58. 8	15.59. 0

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Tabula Cœli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*m*
13.50.12	13.48.44	13.47.24	13.45.48	13.44.24	13.42.28	13.41.16	13.39.44	13.38. 8	0
13.54. 0	13.52.32	13.51 8	13.49.40	13.48.12	13.46.40	13.45. 8	13.43.36	13.42. 4	1
13.57.48	13.56.24	13.55. 0	13.53.32	13.52. 4	13.50.32	13.49. 4	13.47.32	13.46. 0	2
14. 1.40	14. 0.16	13.58.52	13.57.24	13.55.56	13.54.28	13.53. 0	13.51.28	13.49.56	3
14. 5. 2	14. 4. 8	14. 2.44	14. 1.16	13.59.52	13.58.24	13.56.56	13.55.24	13.53.52	4
14. 9.24	14. 8. 0	14. 6.36	14. 5.12	14. 3.48	14. 2.20	14. 0.52	13.59.20	13.57.52	5
14.13.20	14.11.56	14.10.32	14.˙9. 8	14. 7.44	14. 6.16	14. 4.48	14. 3.20	14. 1.52	6
14.17.12	14.15.52	14.14.28	14 13. 4	14.11.40	14.10.12	14. 8.48	14. 8.20	14. 5.52	7
14.21. 8	14.19.48	14.18.24	14.17. 0	14.15.36	14.14.12	14.12.48	14.11.20	14. 9.52	8
14.25. 4	14.23 44	14.22.24	14.21. 0	14.19.36	14.18.12	14.16.48	14.15.24	14.13.56	9
14.29. 0	14.27.40	14.26.20	14.25. 0	14.23.36	14.22.12	14.20.48	14.19.24	14.18. 0	10
14.32.56	14.31.36	14.30.20	14.29. 0	14.27.36	14.26.12	14.24.52	14.23.28	14.22. 4	11
14.36.56	14.35.36	14.34.20	14.33. 0	14.31.40	14.30.16	14.28.56	14.27.32	14.26. 8	12
14.40.52	14.39.36	14.38.20	14.37. 0	14.35.44	14.34.20	14.33. 0	14.31.36	14.30.12	13
14.44.52	14.43.36	14.42.20	14.41. 4	14.39.48	14.38.24	14.37. 4	14.35.44	14.34.20	14
14.48.52	14.47.36	14.46.24	14.45. 8	14.43.52	14.42.32	14.41. 2	14.39.52	14.38.28	15
14.52.52	14.51.36	14.50.24	14.49.12	14°47.56	14.46.36	14.45.16	14.44. 0	14.42.36	16
14.56.52	14.55.40	14.54.28	14.53.16	14.52. 0	14.50.40	14.49.24	14.48 8	14.48.48	17
15. 0.56	14.59.44	14.58.32	14.57.20	14.56. 4	14.54.48	14.53.32	14.52.16	14.51. 0	18
15. 4.56	15. 3.48	15. 2.36	15. 1.24	15. 0.12	14.58.56	14.57.40	14.56.28	14.55.12	19
15. 9. 0	15. 7 52	15. 6.40	15. 5.32	15. 4.20	15. 3. 4	15. 1.52	15. 0.40	14.59.24	20
15.13. 4	15.11.56	15.10.48	15. 9.40	15. 8.28	15. 7.16	15. 6. 4	15. 4.52	15. 3.36	21
15.17. 8	15.16. 0	15.14.56	15.13.48	15.12.36	15.11.28	15 10.16	15. 9. 4	15. 7.52	22
15.21.12	15.20. 8	15.19. 4	15.17.56	15.16.48	15.15.40	15.14.28	15.13.20	15.12. 8	23
15.25.20	15.24.16	15.23.12	15.22. 8	15.21. 0	15.19.52	15 18.44	15.17.36	15.16.24	24
15.29.28	15.28.24	15.27.24	15.26.20	15.25.12	15.24. 8	15.23. 0	15.21.52	15.20.44	25
15.33.36	15.32.36	15.31.36	15.30.32	15.29 28	15.28.24	15.27.16	15.26.12	15.25. 4	26
15.37.48	15.36.48	15.35.48	15.34.48	15.33.44	15 32.40	15.36.36	15.30.32	15.29.24	27
15.48.56	15.41. 0	15.40. 0	15.38. 0	15.38. 0	15.36.56	15.35.52	15.34.52	15.33.44	28
15.46. 8	15.45.12	15.44.12	15.43.16	15.42.16	15.41.12	15.40.12	15.39.13	15.38. 8	29
15.50.20	15.49.24	15.48.28	15.47. 2	15.46.32	15.45.32	15.44.32	15.43.32	15.42.32	30

Tabula Cœli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♓	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I II.	H.I.II.	H.I.II.	H.I.II.
0	15.52. 8	15.55 0	15.53.56	15.54 48	15.55.40	15.56.28	15.57.20	15.58. 8	15.59. 0
1	15.56.16	15.57. 8	15.58. 0	15.58.52	15.59.40	16. 0.28	16. 1.20	16. 2. 8	16. 2.56
2	16. 0.24	16. 1.16	16. 2. 4	16. 2.56	16. 3.44	16. 4.32	16. 5.20	16. 6. 8	16. 6.56
3	16. 4.36	16. 5.24	16. 6.12	16. 7. 4	16. 7.48	16. 8.36	16. 9.24	16.10. 8	16.10.52
4	16. 8.44	16. 9.32	16. 10.20	16.11.12	16.11.51	16.12.36	16.13.24	16.14. 8	16.14.52
5	16.12.56	16.13.40	16.14.28	16.15.20	16.15.56	16.16.40	16.17.24	16.18 8	16.18. 8
6	16.17. 8	16.17.52	16.18.36	16.19. 8	16.20. 4	16.20.44	16.21.28	16.22. 8	16.22.48
7	16.21.20	16.22. 4	16 22.44	16.23.36	16.24. 8	16.24.48	16.24.28	16.26. 8	16.26. 8
8	16.25.32	16.26.16	16.26.56	16.27.44	16.28.16	16.28.52	16.29.32	16.30.12	16.30.48
9	16.29.48	16.30.28	16.31. 8	16.31.52	16.32.24	16.33. 0	16.33.36	16.34.12	16.34.48
10	16.34. 0	16.34.40	16.35. 6	16.35.56	16.36.28	16.37. 4	16,37 40	16. 38.12	16.38.48
11	16.38.16	16.38.52	16.39.28	16.40. 4	16.40.36	16 41. 8	16.41.44	16.42. 16	16.42.52
12	16.42.32	16.43. 4	16.43.40	16.44.12	16.44.44	16.45.16	16.45.48	16.46.20	16.46.52
13	16.46.46	16.47.16	16.47.52	16.48.20	16.48.52	16.49.24	16.49.52	16.50.24	16.50.56
14	16.51. 4	16.51.32	16.52. 4	16.52.32	16.53. 0	16.53.32	16.54. 0	16.54.28	16.54.56
15	16.55.20	16.55.48	16.56.16	16.56.44	16.57.12	16.57.40	16.58. 8	16.58.32	16.59. 0
16	16.59.46	17. 0. 4	17. 0.28	17. 0.56	17. 1.20	17. 1.48	17. 2.12	17. 2.36	17. 3. 4
17	17. 3.52	17. 4.20	17. 4 44	17. 5. 8	17. 5.52	17. 5.56	17. 6.20	17. 6.40	17. 7. 4
18	17. 8.12	17. 8.36	17. 9. 0	17. 9.20	17. 9.44	17.10 4	17.10.28	17.10.48	17.11 8
19	17.12.22	17.12.52	17.13.12	17.13.32	17.13.52	17.14.12	17 14.32	17.14.52	17.15.12
20	17.16.48	17.17. 8	17.17.24	17.17.44	17.18. 4	17.18.20	17.18.40	17.18.56	17.19.16
21	17.21. 8	17.21.24	17.21.40	17.21.56	17.22.16	17.22.32	17.22 48	17.23. 4	17.23.20
22	17.25.24	17.25.40	17.25.52	17.26. 8	17.26.24	17.26.40	17.26.56	17.27. 8	17.27.24
23	17.29.40	17.29.56	17.30. 8	17.30.20	17.30.36	17.30.48	17.31. 4	17.31.12	17.31.28
24	17.34. 0	17.34.12	17.34.24	17.34.36	17.34.48	17.35. 0	17.35.12	17.35.20	17.35.32
25	17.38.20	17.38.28	17.38.40	17.38.48	17.30. 0	17.39. 8	17.39.20	17.39.24	17.39.36
26	17.42.40	17.42.44	17.42.56	17.43. 0	17.43.12	17.43.16	17.43.28	17.43.32	17.43.48
27	17.47. 0	17.47. 4	17.47.12	17.47. 6	17.47.24	17.47.28	17.47.36	17.47.40	17.47.44
28	17.51.20	17.51.20	17.51.28	17.51.28	17.51.36	17.51.36	17.51.44	17.51.44	17.51.48
29	17.55.40	17.55.40	17.55.44	17.55.44	17.55.48	17.55.48	17.55.32	17.55.50	17.55.56
30	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0

Tabu-

Tabula Cęli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.M.	H.I.M.	H.I.M.	H.I.M.	H.I.M.	H.I.M.	H.I.M.	H.I.M.	H.I.M.	
15.50.20	15.49.24	15.48.28	15.47.32	15.46.32	15.45.32	15.44.32	15.43.32	15.42.32	0
15.54.32	15.53.36	15.52.40	15.51.48	15.50.48	15.49.52	15.48.52	15.47.56	15.46.56	1
15.58.44	15.57.48	15.56.56	15.56. 4	15.55. 8	15.54.12	15.54.16	15. 2.20	15.51.20	2
16. 2.56	16. 2. 4	16. 1.12	16. 0.20	15.59.28	15.58.32	15.57.40	15.56.44	15.55.48	3
16. 7. 8	16. 6.20	16. 5.28	16. 4.40	16. 3.48	16. 2.56	16. 2. 4	16. 1. 8	16. 0.16	4
16.11.24	16.10.36	16. 9.48	16. 9. 0	16. 8. 8	16. 7.20	16. 6.28	16. 5.36	16. 4.44	5
16.15.40	16.14.52	16.14. 8	16.13.20	16.12.,32	16.11.44	16.10.56	16.10. 4	16. 9.12	6
16.19.56	16.19. 8	16.18.28	16.17.40	16.16.52	16.16. 8	16.15.20	16.14.32	16.13.40	7
16.24.12	16.23.28	16.22.48	16 22. 0	16.21.16	16.20.32	16.19.44	16.19. 0	16.18.12	8
16.28.28	16.27.48	16.27. 8	16.26.24	16.25.40	16.24.56	16.24.12	16.23.28	16.22.44	9
16.32.44	16.32. 8	16.31.28	16.30.48	16.30. 4	16.29.24	16.28.40	16.28. 0	16.27. 6	10
16.37. 4	16.36.28	16.35.48	16.35.12	16.34.32	16.33.52	16.33.12	16.32.32	16.31.48	11
16.41.24	16.40.48	16.40.12	16.39.36	16.39. 0	16.38 20	16.37.44	16.37. 4	16.36.20	12
16.45.44	16.45. 8	16.44.36	16.44. 0	16.43.24	16.42 48	16.42.12	16.41.36	16.40.56	13
16.50. 4	16.49.28	16.49. 0	16.48 24	16.47.52	16.47.16	16.46.44	16.46. 8	16.45.32	14
16.54.24	16.53.52	16.53.24	16.52.52	16.52.20	16.51.48	16.51.16	16.50.44	16.50. 8	15
16.58.44	16.58.12	16.57.48	16.57.16	16.56.48	16.56.16	16.55.48	16.55.16	16.54.44	16
17. 3. 4	17. 2.36	17. 2.12	17. 1.44	17. 1. 6	17. 0.48	17. 0.20	16.59.52	16.59.20	17
17. 7.24	17. 7. 0	17. 6.36	17. 6.12	17. 5.48	17. 5.20	17. 4.56	17. 4.28	17. 4. 0	18
17.11.44	17.11.24	17.11. 0	17.10.40	17. 0.16	17. 9.52	17. 9.28	17. 9. 4	17. 8.36	19
17.16. 8	17.15.48	17.15.28	17.15. 8	17.14.41	17.14.24	17.14. 0	17.13.40	17.13.16	20
17.20.32	17.20.12	17.19.56	17.19.36	17.19.16	17.18.56	17.18.36	17.18.16	17.17.56	21
17.24.52	17.24.36	17.24.20	17.24. 4	17.23.44	17.23.28	17.23.12	17.22.52	17.22.36	22
17.29.12	17.29. 0	17.28.44	17.28.32	17.28. 16	17.28. 0	17.27.48	17.27.28	17.27.16	23
17.33.36	17.33.24	17.33 12	17.33. 0	17.32.48	17.32.36	17.32.24	17.32. 8	17.31.56	24
17.38. 0	17.37.48	17.37.40	17.37.28	17.37.20	17.37. 8	17.37. 0	17.36.44	17.36.36	25
17.42.24	17.42.12	17.42. 8	17.41.56	17.41.52	17.41.40	17.41.36	17.41.24	17.41.16	26
17.46.48	17.46.40	17.46.36	17.46.28	17.46.24	17.46.16	17.46.12	17.46. 4	17.45.56	27
17.51.12	17.51. 4	17.51. 4	17.50.56	17.50.56	17.50.48	17.50.48	17.50.40	17 50.40	28
17.55.36	17.55.32	17.55.32	17.55.28	17.55.28	17.55.24	17.55.24	17.55.20	17.55.20	29
18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18, 0. 0	30

Tabu-

Tabula Cęli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♑	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.II.I.	H.II.I.	H.I.II.
0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0
1	18. 4.20	18. 4.20	18. 4.16	18. 4.16	18. 4.12	18. 4.12	18. 4. 8	18. 4. 8	18. 4. 4
2	18. 8.40	18. 8.40	18. 8.32	18. 8.32	18. 8.24	18. 8.24	18. 8.16	18. 8.10	18. 8.12
3	18.13. 0	18.12 56	18.12.48	18.12.44	18.12.36	18.12.32	18.12.24	18.12.20	18.12 16
4	18.17.20	18.17.16	18.17. 4	18.17. 0	18.16.48	18.16.44	18.16.32	18.16.28	18.16.20
5	18.21.40	18.21.32	18.21.20	18.21.12	18.21. 0	18.20.52	18.20.40	18.20.36	18.20.24
6	18.25. 0	18.25.48	18.25.36	18.25.24	18.25.12	18.25. 0	18.24.48	18.24.40	18.24.28
7	18.30.20	18.30. 4	18.29.52	18.29.40	18.29.24	18.29.12	18.28.56	18.28.48	18.28.32
8	18.34.36	18.34.20	18.34. 8	18.33.52	18.33.36	18.33.20	18.33. 4	18.32.52	18.32.36
9	18.38.32	18.38.36	18.38.20	18.37. 4	18.37.44	18.37.28	18.37.12	18.36.56	18.36.40
10	18.43.12	18.42.52	18.42.36	18.42.16	18.41.56	18.41.40	18 41.20	18.41. 4	18.40.44
11	18.47.32	18.47. 8	18.46.48	18.46.28	18.46. 8	18.45.48	18.45.28	18.45. 8	18.44.48
12	18.51 48	18.51.24	18.51. 0	18.50.40	18 50.16	18.49.56	18.49.32	18.49.12	18.48 52
13	18.56. 8	18.55.40	18.55.16	18.54.52	18.54.28	18.54. 4	18.53.40	18.53.20	18.52.56
14	19. 0.24	18.59.56	18.59.32	18.59. 4	18.58.40	18.58.12	18.57.48	18.57.24	18.56.56
15	19. 4 40	19. 4.12	19. 3.44	19. 3.16	19. 2.48	19. 2.20	19. 1.52	19. 1.28	19. 1. 0
16	19. 8.56	19. 8.28	19. 7.56	19. 7.28	19. 7. 0	19. 6.28	19. 6. 0	19. 5.32	19. 5. 4
17	19.13.12	19.12.44	19.12. 8	19.11.40	19.11. 8	19.10.36	19.10. 8	19. 8.56	19. 9. 4
18	19.17.28	19.16.56	19.16.20	19.15.48	19.15.16	19.14.44	19.14.12	19.13.40	19.13. 8
19	19.21.44	19.21. 8	19.20.32	19.19.56	19.19.24	19.18.52	19.18.16	19.17.44	19.17. 8
20	19.26. 0	19.25.20	19.24.44	19.24. 4	19.23.32	19.22.56	19.22.20	19.25.48	19.21.12
21	19.30.12	19.29.32	19.28.52	19.28. 8	19.27.36	19.27. 0	19.26.24	19.25.48	19.25.12
22	19.34.28	19.33.44	19.33. 4	19.32.16	19.31.44	19.31. 8	19.30.28	19.29.48	19.29.12
23	19.38.40	19.37.56	19.37.16	19.36.24	19 34.52	19.35.12	19.34.32	19.33.52	19.33.12
24	19.42.52	19.42. 8	19.41.24	19.40 32	19.39.56	19.39.16	19.38.32	19.37.52	19.37.12
25	19.47. 4	19.46.20	19.45.32	19.44.40	19.44. 4	19.43.20	19.42.36	19.41.52	19.41.12
26	19.51.16	19.50.28	19.49.40	19.48 48	19.48. 8	19.47.24	19.46.36	19.45.52	19.45.12
27	19.55.24	19.54.36	19.53.48	19.52.56	19.52.12	19.51.24	19.50.36	19 49.52	19.49. 8
28	19.59 36	19.58.44	19.57.56	19.57. 4	19.56.16	19.55.28	19.54.40	19.53.52	19.53. 4
29	20. 3.44	20 2.52	20. 2. 0	20. 1. 8	20. 0. 8	19.59.32	19 58.40	19.57.52	19.57. 4
30	20. 7.52	20. 7. 0	20. 6. 4	20. 5.12	20. 4. 4	20. 3.32	20. 2.40	20. 1.52	20. 1. 0

Tabu-

Tabula Cœli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	H.M.M.	♑
18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	18. 0. 0	0
18. 4. 4	18. 4.28	18. 4.28	18. 4.32	18. 4.32	18. 4.36	18. 4 36	18. 4.40	18. 4.40	1
18. 8.48	18. 8.56	18. 8.56	18. 9. 4	18. 9. 4	18. 9.12	18. 9.12	18. 9.20	18. 9.20	2
18.13.12	18.13.20	18.13.24	18.13.32	18.13.36	18.13 44	18.13.48	18.13.56	18 .14. 4	3
18.17.38	18.17.48	18.17.52	18.18. 4	18.18. 8	18.18 20	18.18.24	18.18.36	18.18.44	4
18.22. 0	18.22.12	18.22.20	18.22.32	18.22.40	18.22.52	18.25. 0	18.23.16	18.23.24	5
18.26.24	18.26.36	18.26.48	18.27. 0	18 27.12	18.27.24	18.27 36	18.27.52	18.28. 4	6
18.30.48	18.31. 0	18.31.16	18.31.28	19.31 44	18.32. 0	18.32.12	18.32.32	18.32 44	7
18.35. 8	18.35.24	18.35.40	18.35.56	18.36.16	18.36.32	18.36.48	18.37. 8	18.37.24	8
18.39.28	18.39.48	18.40. 4	18.40 24	18 40 44	18.41. 4	18. 4.24	18.41.44	18.42. 4	9
18.43.52	18.44.12	18.44.32	18.44.52	18.45.16	18.45.36	18.46. 0	18.46 20	18.46.44	10
18.48.12	18.48.36	18.49. 0	18.49 20	18.49 44	18.50. 8	18.50.32	18.50.56	18.51.24	11
18.52.36	18.53. 0	18.53.24	18.53.48	18.54.12	18.54.40	18 55. 4	18.55.32	18.56. 0	12
18.56.56	18.57.24	18.57.48	18.58.16	18.58.44	18.59.12	18.59.40	19. 0. 8	18. 0.40	13
19. 1.16	19. 1.48	19. 2.12	19. 2.44	19. 5.12	19. 3.44	19. 4.12	19. 4.44	18. 5.16	14
19. 5.36	19. 6. 8	19. 6.36	19. 7. 8	19. 7.40	19. 8.12	19. 8.44	19. 9.16	19. 9.52	15
19. 9.56	19.10 32	19.11. 0	19.11.36	19.14. 8	19 12.44	19.13.16	19.13.52	19.14.28	16
19.14.16	19.14.52	19.15.24	19.16. 0	19.16.36	19.17.12	19.17.48	19.18.24	19.19. 4	17
19.18.36	19.19.12	19.19.48	19.20.24	19.21. 0	19.21.40	19.22.16	19.22.50	19.23.40	18
19.22. 6	19.23.32	19.24 12	19.24.48	19.25.28	19.26. 8	19.26.48	19.27.28	19.28.12	19
19.27.16	19 27.52	19.28,52	19.29.12	19.29.56	19.30.36	19.31.20	19.32. 0	19 32.44	20
19 31.32	19.32.12	19.32.52	19.34.36	19.34,20	19.35. 4	19.35.48	19.36.32	19.37.16	21
19.35.48	19.36.32	19.37.12	19.38. 0	19.28.44	19.39.28	19.40.16	19.41. 0	19.41.48	22
19.40. 4	19.40.52	19.41.32	19.42.20	19.43. 8	19.43.52	19.44.40	19.45.28	19.46.20	23
19.45.20	19.45 8	19.45.52	19.46.40	19.47.28	19 48.16	19.49. 4	19.49.56	19.50.48	24
19.48. 6	19.49 24	19.50.12	19.51. 0	19.51.52	19.52.40	19.53.32	19.54.24	19.55.16	25
19.52.52	19.53.40	19.54.32	19.55.20	19.56.12	19.57. 4	19.57.56	19.58.52	19.59.44	26
19.57. 4	19.57.56	19.58.48	19.59.40	20. 0.32	20. 1.28	20. 2.20	20. 3.16	20. 4.12	27
20. 1.16	20. 2.12	20. 3. 4	20. 3.56	20. 4.52	20. 5.48	20. 6.44	20. 7.40	20. 8.42	28
20. 5.28	20. 6.24	20. 7.20	20. 8.12	20. 9.12	20.10. 8	20.11. 8	20.12. 4	20.13. 4	29
20. 9.40	20.10.26	20.11.32	20.12.28	20.13.28	20.14.28	20.15.28	20.16.28	20.17.28	30

Tabula Cęli Mediationum.

Latitudo Septemtrionalis.

♒	1 H.I.II.	2 H.I.II.	3 H.I.II.	4 H.I.II.	5 H.I.II.	6 H.I.II.	7 H.I.II.	8 H.I.II.	9 H.I.II.
0	20. 7.52	20. 7. 0	20. 6. 4	20. 5.12	20. 4. 0	20. 3.32	20. 2.40	20. 1.52	20 1. 0
1	20.12. 0	20.11. 8	20.10.12	20. 9.16	20. 8.24	20. 7.32	20. 6.40	20. 5.52	20. 5. 0
2	20.16. 8	20.15.12	20.14.16	20.13.20	20.12.24	20.11.32	20.10.40	20. 9.48	20. 8.56
3	20.20.12	20.19.16	20.18.20	20.17.24	20.16.28	20.15.32	20.14.36	20.13.44	20.12.52
4	20.24.20	20.23.24	20.22.24	20.21.28	20.20.28	20.19.32	20.18.36	20.17.40	20.16.48
5	20.28.28	20.28.28	20.26.24	20.25.28	20.24.28	20.23.28	20.22.32	20.21.36	20.20.40
6	20.32.32	20.31.32	20.30.28	20.29.28	20.28.28	20.27.28	20.26.28	20.25.32	20.24.32
7	20.36.36	20.35.36	20.34.28	20.33.28	20.32.28	20.31.24	20.34.20	20.29.28	20.28.24
8	20.40 40	20.39.36	20.38.28	20.37.28	20.36.24	20.35.20	20.34.20	20.33.20	20.32.16
9	20.44.40	20.43.36	20.42.28	20.41.24	20.40.20	20.39.16	20.38.12	20.37.12	20.36. 8
10	20.46.44	20.47.36	20.46.28	20.45.24	20.44.16	20.43.12	20.42. 8	20.41. 8	20.40. 0
11	20.52.44	20.51.36	20.50.28	20.49.20	20.48.12	20.47. 8	20.46. 4	20.45. 0	20.43.52
12	20.56.44	20.55.36	20.54.28	20.53.16	20.52. 8	20.51. 4	20.49.56	20.48.52	20.47.44
13	21. 0.44	20.59.36	20.58.24	20.57.12	20.56. 4	20.55. 0	20.53.48	20.52.44	20.51.36
14	21. 4.44	21. 3.32	21. 2.20	21. 1. 8	21. 0. 0	20.58.52	20.57.40	20.56.36	20 55.28
15	21. 8.40	21. 7.28	21. 6.10	21. 5. 4	21. 3.52	21. 2.44	21. 1.32	21. 0.24	20.59.16
16	21.12.40	21.11 24	21.10.12	21. 9. 0	21. 7.48	21. 6.36	21. 5.24	21. 4.16	21. 3. 4
17	21.16.36	21.15.20	21.14. 8	21.12.56	21.11.40	21.10.28	21. 9.16	21. 8. 8	21. 6.52
18	21.20.32	21.19.16	21.18. 0	21.16.48	21.15.32	21.14.20	21.13. 8	21.11.56	21.10.40
19	21.24.28	21.23.12	21.21.56	21.20.40	21.19.24	21.18.12	21.17. 0	21.15.44	21.14.28
20	21.28.24	21.27. 8	21.25.48	21.24.32	21.23.16	21.22. 4	21.20.48	21.19.32	21.18.16
21	21.32.16	21.31. 0	21.29.40	21.28.24	21.27. 8	21.25.52	21.24.36	21.23.20	21.22. 4
22	21.36.12	21.34.52	21.33.32	21.32.16	21.31. 0	21.29.40	21.28.24	21.27. 8	21.25.52
23	21.40. 4	21.38.44	21.37.24	21.36. 8	21.34.48	21.33.28	21.32.12	21.30.56	21.29.40
24	21.43.56	21.42.36	21.41.16	21.39.56	21.38.36	21.37.16	21.35.56	21.34.40	21.33.24
25	21.47.48	21.46.28	21.45. 8	21.43.44	21.42.24	21.41. 4	21.39.44	21.38.28	21.37. 8
26	21.51.40	21.50.20	21.48.56	21.47.32	21.46.12	21.44.52	21.43.32	21.42.12	21.40.52
27	21.55.32	21.54. 8	21.52.44	21.51.20	21.49.56	21.48.36	21.47.16	21.45.56	21.44.36
28	21.59.20	21.57.16	21.56.32	21.55. 8	21.53.44	21.52.24	21.51. 4	21.49.40	21.48.20
29	22. 3. 8	22. 1.44	22. 0.20	21.58.56	21.57.32	21.56.12	21.54.48	21.53.24	21.52. 4
30	22. 6.56	22. 5.32	22. 4. 8	22. 2.44	21. 1.20	21.59.56	21.58.32	21.57. 8	21.55.44

Tabu-

Tabula Cœli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	[illegible]
20. 9.40	20.10.36	20.11.32	20.12.28	20.13.28	20.14.28	20.15.28	20.16.29	20,17.28	0
20.13.52	20.14.48	20.15.48	20.16.44	20.17.44	20.18.48	20.19.48	20,20.48	20.21.52	1
20.18. 4	20.19. 0	20.20. 0	20.21. 0	20.22. 0	20.23. 4	20.24. 8	20.25. 8	20.26 16	2
20.22.12	20.23.12	20.24.12	20.25.12	20.26.16	20.27.20	20.28.24	20.29.28	20.30.36	3
20.26.24	20.27.24	20.28.24	20.29.28	20.30.32	20.31.36	20.32.44	20.33.48	20.34.56	4
20.30.32	20.31.36	20.32.36	20.33.40	20.34.48	20.35.54	20.37. 0	20.38. 8	20.39.16	5
20 34.40	20.35.44	20.36.48	20 37.52	20.39. 0	20.40. 8	20.41.16	20.42.24	20.43.36	6
20.38 48	20.39.52	20.40.56	20.42. 4	20.43.12	20.44.20	20.45.32	20.46.46	20.47.52	7
20.42.52	20.44. 0	20.45. 4	20.46.12	20.47.24	20.48.32	20.49.44	20.50.56	20.52. 8	8
20.46.48	20.48. 0	20.49.12	20.50.20	20.51.32	20.52.44	20.53.56	20.55. 8	20.56.24	9
20.51. 0	20.52. 8	20.53.20	20.54.28	20.55.40	20.56.56	20.58. 8	21.59.20	21. 0.36	12
20.55. 4	20.56.12	20.57.24	20.58.36	20.59.48	21. 1. 4	21. 2.20	21. 3.32	21. 4.48	13
20.59. 4	21. 0.16	21. 1.28	21. 2.40	21. 3.56	21. 5.12	21. 5.24	21. 7.44	21. 9. 0	17
21. 3. 8	21. 4.20	21. 5.32	21. 6.44	21. 8. 0	21. 9.20	21.10.36	21.11.52	21.13.12	15
21. 7. 8	21 8.24	21. 9.16	21.10.48	21.12 4	21.13.24	2114.44	21.16. 0	21.17.24	16
21.11. 8	21.12.24	21.13.38	21.14.52	21.16. 8	21.17.28	21.18.48	21.20. 8	21.21.32	15
21.15. 8	21.16.24	21.17 40	21.18.56	21.20.12	21.21.36	21.22.56	21.24.16	21.25.40	16
21.19. 8	21.20.24	21.21.40	21.23. 0	21.24.12	21.25.40	21.27. 0	21.28.24	21.29.48	17
21.23. 4	21.24.24	21.25.40	21.27. 0	21.28.20	21.20.44	21.31. 4	21.32.28	21.33.52	18
21.27. 4	21.28.24	21.29.40	21.31. 0	21.32.24	21.33.48	21.35. 8	21.36.32	21.37.56	19
21.31. 0	21.32.12	21 33.40	21.35. 0	21.36.24	21.37.48	21,39.12	21.40.36	21.42. 0	20
21.34.56	21.36.16	21.37.36	21.34. 0	21.40.24	21.41.48	21.43.12	21.44.36	21.46. 4	21
21.38.52	21.40.12	21.41.36	21.43. 0	21.44.24	21.45.48	21.47.12	21.48.40	21.50. 8	22
21.42.48	21.44. 8	21.45.32	21.46.56	21.48.20	21.49.48	21.51.12	21.52.40	21.54. 8	23
21.46.40	21.48. 4	21.49.28	21.50.52	21.52.16	21.53.44	21.55.12	21.56.40	21.58. 8	24
21.50.54	21.52. 0	21.53.24	21.54.48	21.56.12	21.57.40	21.59. 8	22. 0 40	22. 2. 8	25
21.54.28	21.55.52	21.57.16	21.58.44	22. 0. 8	22. 1.36	22. 3. 4	22. 4.36	22. 6. 8	26
21.58.20	21.59.44	22. 1. 8	22. 2.36	22. 4. 4	22. 5.32	22. 7. 0	22. 8.32	22.10. 4	27
22. 2.12	22. 3.36	22. 5. 0	22. 6.28	22. 7.56	22. 9.28	22.10.56	22.12.28	22.14. 0	28
22. 6.20	22. 7.28	22. 8.52	22.10.20	22.11.48	22.13.20	22.14.52	22.16 24	22.17.56	29
22. 9.48	22.11.16	22.12.40	22.14.12	22.15.36	22.17.12	22.18.40	22.20.16	22.21.52	30

Tabu-

Tabula Cœli Mediationum.

Latitudo Septemtrionalis.

	1	2	3	4	5	6	7	8	9
♓	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.II.I.
0	22. 6.50	22. 5.32	22. 4. 8	22. 2.44	22. 1.20	21.59.56	21.58.32	21.57. 8	21.55 44
1	22.10.44	22, 9.20	22. 7.56	22. 6.32	22. 5. 4	22. 3.40	22. 2 16	22, 0.52	21.59.28
2	22.14.32	22.13. 8	22.11.40	22 10.16	22. 8.48	22. 7.24	22. 6. 0	22. 4.36	22, 3.12
3	22.18.20	22.16.52	22.15.24	22.14. 0	22.12.32	22.11. 8	22. 9.40	22. 8.16	22. 6.52
4	22.22. 8	22.20.40	22.19.12	22.17.44	22.16.16	22 14.52	22.13.24	22.12. 0	22.10.36
5	22.25.56	22.24.28	22.22.56	22.21.28	22.20. 0	22.18.36	22.17. 8	22.15.40	22.14.16
6	22.29.40	22.28.12	22.26.40	22.25.12	22.23.44	22.22.16	22.20.48	12.19.20	22.17.56
7	22.33.28	22.31.56	22,30.24	22.28.56	22.27.28	22.26. 0	22.24.32	22.23. 4	22.21.36
8	22.37.12	22.35.40	22.34. 8	22.32.49	22.31.12	22.29.44	22.28.12	22.26.44	22.25.16
9	22.40.56	22.29.24	22.37.52	22.36.24	22.34.52	22.33.24	22 31.52	22.30.24	22.28.56
10	22.44.40	22.43. 8	22.41.36	22.40. 8	22.38.36	22.37. 8	22.35.36	22.34. 4	22.32.36
11	22.48.24	22.46.52	22.45.20	22.43.52	22.42 40	22.40.48	22.39.16	22.37.44	22.36.16
12	22.52. 8	22.50.36	22.49. 4	22.47.32	22.46. 0	22.44.28	22.42.56	22.41.24	22.39.56
13	22.55.52	22.54.20	22.52.48	22.51.16	22.49.40	22.48. 8	22.46.36	22 45 4	22.43.36
14	22.59.32	22.58. 0	22.56.28	22.54.56	22.53.20	22.51.48	22.50.16	22.48.44	22.47.12
15	23. 3.12	23. 1.40	23. 0. 8	22.58.36	22.57. 0	22.55.28	22.53.56	22 52.24	22.50.52
16	23. 6.56	23. 5.24	23. 3.48	23. 2.16	23. 0.40	22.59. 9	22.57.36	22.56. 4	22.54.32
17	23.10.40	23. 9. 8	23. 7.28	23. 5.56	23. 4.20	23. 2.48	23. 1.16	22.59.44	22.58.12
18	23.14.20	23.12.48	23.11. 8	23. 9.36	23. 8. 0	23. 6.28	23. 4.52	23. 3.24	23. 1.48
19	23.18. 4	23.16.28	23.14.52	24 13.16	23.11 40	23.10. 8	23. 8.32	23. 7. 4	23. 5.28
20	23.21.44	23.20. 8	23.18.32	23.16.56	23.15.20	23.13 48	23.12.12	23.10.44	23. 9. 8
21	23.25.24	23.23.48	23,22.12	23.20.36	23.19. 0	23.17.28	23.15.52	22.14.20	23.12 44
22	23.29. 4	23.27.28	23.25.52	23.24.16	23.22.40	23.21. 8	23.19.32	23.18 0	23.16.24
23	23.32.44	23.31. 9	23.29.32	23.27.56	23.26.20	23.24.48	23.23.12	23.21.40	23.20. 4
24	23.36.24	23.34.48	23.33.12	23.31.36	23.30. 0	23.28.28	23.26.52	23.25 20	23.23.44
25	23.40. 8	23.38.32	23.36.56	23.35.20	23.33.44	23 32. 8	23.30.32	23.29. 0	23.27.20
26	23.43.48	23.42.12	23.40.36	23.39. 0	23.37.24	23.35.48	23.34.12	23.32.40	23.31. 0
27	23.47.28	23.45.52	23.44.16	23.42.40	23.48. 4	23.39.28	23.37.52	23.36.36	23.34.36
28	23.51. 8	23.49.32	23.47.56	23.46.20	23.44.44	23.43. 8	23.43.32	23.39.56	23.38.16
29	23.54.48	23.53.12	23.51.36	23.50. 0	23.48.24	23.46.48	23.45.12	23.43.36	23.41 56
30	23.58.28	23.56.52	23.56.16	23.53.40	23.52. 4	23.50.28	23.48.52	23.47.12	23.45.32

Tabu-

Tabula Cœli Mediationum.

Latitudo Meridiana.

1	2	3	4	5	6	7	8	9	
H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	♓
22. 9.48	22.12.16	22.12.40	22.14.12	22.15.36	22.17.12	22.18.44	22.22.16	22.21.52	0
22.13.40	22.15. 8	22.16.32	22.18. 4	22.19.32	22.21. 4	22.22.36	22.24.12	22.25.48	1
22.17.28	22.18.56	22.20.24	22.21.56	22.23.24	22.24.56	22.26.28	22.28. 4	22.29.40	2
22.21.16	22.22.44	22.24.12	22.25.44	22.27.16	22.28.48	22.30.20	22.31.56	22.33.32	3
22.25. 4	22.26.36	22.28. 4	22.29.36	22.31. 8	22.32.40	22.34.12	22.35 48	22.37.24	4
22.28.52	22.30.24	22.31.52	22.33.24	22.34.56	22.36.32	22.38. 4	22.39.40	22.41.16	5
22.32.40	22.34.12	22.35.40	22.37.12	22 38 44	22.40.20	22.41.52	22.43.28	22.45. 4	6
22.36.28	22.38. 0	22.39.28	22.41. 0	22.42.32	22.44. 8	22.45.40	22.47.16	22.48.52	7
22.40.16	22.41.48	22.43.16	22.44.48	22.46.20	22.47.56	22.49.28	22.51. 4	22.52.40	8
22.44. 0	22.45.32	22.47. 4	22.48.36	22.50. 8	22.51.44	22.52.16	22.54.52	22.56.28	9
22.47.44	22.49.16	22.50.48	22.52.24	22.53.56	22.55.32	22.57. 4	22.58.40	23. 0.16	10
22.51.28	22.53. 0	22.54.12	22.56. 8	22.57.40	22.59.16	23. 0.52	23. 2.28	23. 4. 4	11
22.55.12	22.56.44	22.58.16	22.59.52	23. 1.24	23. 3. 0	23. 4.36	23. 6.12	23. 7.48	12
22.58.56	23. 0.28	23. 2. 0	23. 3 36	23. 5.12	23. 6.48	23. 2.24	23 10. 0	23.11.36	13
23. 2.40	23. 4.12	23. 5.44	23. 7.20	23. 8.56	23.10.32	23.12. 8	23.13.44	23.15 20	14
23. 6.28	23. 7.56	23, 0.28	23.11. 4	23.12.40	23.14.16	23.15.52	23.17.28	23.19. 4	15
23.10. 4	23.11.40	23.13.12	23.14.48	23.16.24	23.18. 0	23.19.36	23.21.12	23.22.48	16
23.13.48	23.15.24	23.16.56	23.18.32	23.20. 8	23.21.44	23 23.20	23.24.56	23.26.32	17
23.17.28	23.19. 4	23.20,36	23.22.12	23.23.48	23.25.24	23.27. 0	23.28.36	23.30.12	18
23.21.12	23.22.48	23.24.20	23.25.56	23.27.32	23.29.48	23.30. 44	23 32.20	23.33.56	19
23.24.52	23.26.28	23.28. 4	23.20.40	23.31.16	23.32.52	23.34.28	23.36. 0	23.37.36	20
23.28.32	23.30. 8	23.31.44	23.33.20	23.34.56	23.36 32	23.38. 8	23.39.40	23.41.16	21
23.32.12	23.33.48	23.25.14	23.37. 0	23.38.36	23 40.12	23.41.48	23.43.20	23.44.56	22
23.35.52	23.37.28	23.39. 4	23.40.40	23.42.16	23.43.52	23.45.28	23.47. 4	23.48.40	23
23.39.32	23.41. 8	23.42.44	23.44.20	23.42.56	23.47.32	23.49. 8	23.50.44	23.51.20	24
23.43.12	23.44.48	23.46.24	23.48. 0	23.49.36	23.51.12	23.52.48	23.54.24	23.56. 0	25
23.46.52	23.48.28	23.50. 4	23.51.10	23.53.10	23.54.52	23.56.28	23.58 4	23.59.40	26
23.50.32	23.52. 8	23.53.44	23.55.20	23.56.56	23.58.32	0. 0. 0	0. 1.44	0. 3.20	27
23.54.12	23.55.48	23.57.24	23.59. 0	0. 6.36	0. 2.12	0. 3.48	0. 5.28	0. 7. 4	28
23.57.52	23. 7.28	0. 1. 4	0. 2.40	0. 4.16	0. 5.52	0. 7.28	0. 9. 8	0. 10.44	29
0. 1. 32	0. 11.16	0. 4.44	0. 6.20	0. 7.56	0. 0 32	0. 11. 8	0. 12.48	0. 14.24	30

Tabulæ Differentiarum Aſcenſionalium.

Altitudines Poli ſi in latere ſumatur Declinatio Stellæ, vel Declinatio Stellæ ſi in latere ſumatur Altitudo Poli.

Declinatio Stellæ.

	1		2		3		4		5		6		7		8		9		10	
G.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
1	0.	4	0.	8	0.	12	0.	16	0.	20	0.	24	0.	28	0.	32	0.	36	0	44
2	0.	8	0.	16	0.	24	0.	32	0.	40	0.	52	1.	0	1.	8	1.	16	1.	24
3	0.	12	0.	24	0.	36	0.	52	1.	4	1.	16	1.	28	1.	40	1.	56	2.	8
4	0.	16	0.	32	0.	52	1.	8	1.	24	1.	40	2.	0	2.	16	2.	32	2.	48
5	0.	20	0.	40	1.	4	1.	24	1.	44	2.	8	2.	28	2.	48	3.	12	3.	32
6	0.	24	0.	52	1.	16	1.	40	2.	8	2.	32	2.	56	3.	24	3.	48	4.	16
7	0.	28	1.	0	1.	28	2.	0	2.	28	2.	56	3.	28	3.	56	4.	28	4.	56
8	0.	32	1.	8	1.	40	2.	16	2.	48	3.	24	3.	56	4.	32	5.	4	5.	40
9	0.	38	1.	16	1.	56	2.	32	3.	12	3.	48	4.	28	5.	4	5.	44	6.	24
10	0.	44	1.	24	2.	8	2.	48	3.	32	4.	16	4.	56	5.	40	6.	24	7.	8
11	0.	48	1.	32	2.	20	3.	8	3.	52	4.	40	5.	28	6.	16	7.	4	7.	52
12	0.	52	1.	40	2.	32	3.	24	4.	16	5.	8	6.	0	6.	52	7.	44	8.	36
13	0.	56	1.	52	2.	48	3.	44	4.	36	5.	32	6.	28	7.	28	8.	24	9.	20
14	1.	0	2.	0	3.	0	4.	0	5.	0	6.	0	7.	0	8.	0	9.	4	10.	4
15	1.	4	2.	8	3.	12	4.	16	5.	24	6.	28	7.	32	8.	40	9.	44	10.	48
16	1.	8	2.	16	3.	28	4.	36	5.	44	6.	56	8.	4	9.	16	10.	24	11.	36
17	1.	12	2.	28	3.	40	4.	52	6.	8	7.	20	8.	36	9.	52	11.	8	12.	20
18	1.	16	2.	36	3.	56	5.	12	6.	32	7.	48	9.	8	10.	28	11.	48	13.	8
19	1.	24	2.	44	4.	8	5.	32	6.	56	8.	16	9.	40	11.	4	12.	32	13.	56
20	1.	28	2.	56	4.	24	5.	48	7	16	8.	48	10.	16	11.	44	13.	12	14.	44
21	1.	32	3.	4	4.	36	6.	8	7.	40	9.	16	10.	48	12.	24	13.	56	15.	32
22	1.	36	3.	16	4	52	6.	28	8.	8	9.	44	11.	24	13.	0	14.	40	16.	20
23	1.	40	3.	24	5.	8	6.	48	8.	32	10.	12	11.	59	13.	40	15.	24	17.	12
24	1.	48	3.	32	5.	20	7.	8	8.	56	10.	44	12.	32	14.	20	16.	12	18.	0
25	1.	52	3.	44	5.	36	7.	28	9.	20	11.	16	13.	8	15.	0	16.	56	18.	52
26	1.	56	3.	56	5.	52	7.	48	9.	48	11.	44	13.	44	15.	44	17.	44	19.	44
27	2.	4	4.	4	6.	8	8.	12	10.	12	12.	16	14.	20	16.	24	18.	32	20.	35
28	2.	8	4.	16	6.	24	8.	32	10.	40	12.	48	15.	0	17.	8	19.	20	21.	32
29	2.	12	4.	28	6.	40	8.	52	11.	8	13.	20	15.	36	17.	52	20.	8	22.	28
30	2.	20	4.	36	6.	56	9.	16	11.	36	13.	56	16.	16	18.	36	21.	0	23.	24
31	2.	24	4.	48	7.	12	9.	36	12.	4	14.	28	16.	56	19.	24	21.	52	24.	20
32	2.	28	5.	0	7.	32	10.	0	12.	32	15.	4	17.	36	20.	8	22.	44	25.	20

In hac Tabula intellige Minuta, & ſecundas Horæ.

Tabu-

Tabulæ Differentiarum Aſcenſionalium.

Altitudines Poli.

Stellæ Declinatio	11	12	13	14	15	16	17	18	19	20
G.	l. ll.	l. ll.	l. ll.	l. ll.	l. ll.	l. ll.	l. ll.	l. ll.	l. ll.	l. ll.
1	0. 48	0. 52	0. 56	1. 0	1. 4	1. 8	1. 12	1. 16	1. 24	1. 28
2	1. 32	1. 48	1. 52	2. 0	2. 8	2. 16	2. 28	2. 36	2. 44	2. 56
3	2. 20	2. 32	2. 48	3. 0	3. 12	3. 28	3. 40	3. 56	4. 8	4. 24
4	3. 8	3. 24	3. 44	4. 0	4. 18	4. 36	4. 56	5. 12	5. 32	5. 48
5	3. 52	4. 16	4. 36	5. 0	5. 24	5. 44	6. 8	6. 32	6. 56	7. 16
6	4. 40	5. 8	5. 32	6. 0	6. 28	6. 56	7. 20	7. 48	8. 16	8. 48
7	5. 28	6. 0	6. 28	7. 0	7. 32	8. 4	8. 36	9. 8	9 40	10. 16
8	6. 16	6. 52	7. 28	8. 0	8. 36	9. 16	9. 52	10. 24	11. 4	11. 44
9	7. 4	7. 44	8. 24	9. 4	9. 44	10. 24	11. 8	11. 48	12. 32	13. 12
10	7. 52	8. 36	9. 20	10. 4	10. 48	11. 36	12. 20	13. 3	13. 56	14. 44
11	8. 40	9. 28	10. 16	11. 8	11. 56	12. 48	13. 36	14. 28	15. 20	16. 12
12	9. 28	10. 20	11. 16	12. 10	13. 7	14. 0	14. 56	15. 52	16. 48	17. 44
13	10. 16	11. 16	12. 12	13. 12	14. 12	15. 12	16. 12	17. 12	18. 16	19. 16
14	11. 8	12. 8	13. 12	14. 16	15. 20	16. 24	17. 28	18. 36	19. 44	20. 48
15	11. 56	13. 4	14. 12	15. 20	16. 28	17. 36	18. 48	20. 0	21. 12	22. 24
16	12. 48	14. 0	15. 12	16. 24	17. 36	18. 52	20. 8	21. 24	22. 40	23. 56
17	13. 36	14. 56	16. 12	17. 28	18. 48	20. 8	21. 28	22. 48	24. 8	25. 34
18	14. 28	15. 52	17. 12	18. 36	20. 0	21. 24	22. 48	24. 16	25. 40	27. 8
19	15. 20	16. 48	18. 16	19. 40	21. 12	22. 40	24. 12	25. 40	27. 16	28. 48
20	16. 12	17. 44	19. 16	20. 48	22. 24	23. 56	25. 32	27. 8	28. 48	30. 28
21	17. 8	18. 44	20. 20	22. 8	23. 36	25. 16	26. 56	28. 40	30. 24	32. 8
22	18. 0	19. 44	21. 24	23. 0	24. 52	26. 36	28. 24	30. 12	32. 0	33. 48
23	18. 56	20. 44	22. 28	24. 20	26. 8	27. 56	29. 48	31. 44	33. 36	35. 32
24	19. 52	21. 44	23. 36	25. 32	27. 24	29. 20	31. 16	33. 16	35. 16	37. 16
25	20. 48	22. 44	24. 44	26. 44	28. 44	30. 44	32. 48	34. 52	36. 56	39. 4
26	21. 44	23. 48	25. 52	27. 56	30. 4	32. 8	34. 26	36. 28	38. 40	40. 56
27	22. 44	24. 52	27. 0	29. 12	31. 24	33. 36	35. 53	38. 8	40. 24	42. 44
28	23. 44	25. 56	28. 12	30. 28	32. 44	35. 4	37. 24	39. 48	42. 12	44. 36
29	24. 44	27. 4	29. 24	31. 48	34. 8	36. 36	39. 0	41. 32	44. 0	4[illegible]. 32
30	25. 48	28. 12	30. 40	33. 8	35. 36	38. 8	40. 40	43. 16	45. 52	48. 32
31	26. 52	29. 20	31. 52	34. 28	37. 4	39. 40	42. 20	45. 4	47. 44	50. 32
32	27. 56	30. 32	32. 12	35. 52	38. 32	41. 16	44. 4	46. 52	49. 40	52. 36

In hac Tabula intellige minuta, & ſecundas Horæ.

Tabula Differentiarum Aſcenſionalium.

Declinatio Stellæ.

	Altitudines Poli.									
	21	22	23	24	25	26	27	28	29	30
G	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.II.I.	H.II.I.	H.I.II.	H.I.II.
1	0. 1.32	0. 1.36	0. 1.40	0. 1.48	0. 1.52	0. 1.56	0. 2. 4	0. 2. 8	0. 2.12	0. 2.20
2	0. 3. 4	0. 3.16	0. 3.24	0. 3.32	0. 3.44	0. 3.50	0. 4. 4	0. 4.28	0. 4.28	0. 4.36
3	0. 4.36	0. 4.52	0. 5. 8	0. 5.20	0. 5.36	0. 5.46	0. 6. 8	0. 9.24	0. 6.40	0. 6.56
4	0, 6. 8	0. 6.28	0. 6.48	0. 7. 8	0. 7.28	0. 7.42	0. 8,12	0. 8.32	0. 8.52	0. 9.16
5	0. 7.40	0. 8. 8	0. 8.32	0 8.56	0. 9.20	0. 9.42	0.10.12	0.10.40	0.11. 8	0.11.36
6	0. 9.16	0. 9.44	0.10.12	0.10.44	0 11.16	0.11.42	0.12.16	0'12.48	0.13.20	0.13.56
7	0.10.44	0.11.24	0.11.56	0.12.32	0.13. 8	0.13.42	0.14.20	0.15. 0	0.15.36	0.16.16
8	0.12.24	0,13. 0	0.13.40	0.14.20	0.15. 0	0.15.42	0.16.24	0.17. 8	0.17.52	0 18.36
9	0.13.56	0.14.40	0.15.24	0.16.12	0.16.50	0.17.42	0.18.33	0.19.20	0 20. 8	0.21. 0
10	0.15.32	0.16.20	0.17.12	0.18. 0	0.18.52	0.19.42	0.20.36	0.21.32	0.22,28	0.23.24
11	0.17. 8	0.18. 0	0.18.56	0.19.52	0.20.48	0.21.42	0.22,44	0.23.44	0.24.44	0.25.48
12	0.18.44	0.19.44	0.20.44	0.21.44	0.22.44	0.23.46	0.24.52	0.25.56	0.27. 4	0.28.12
13	0.20.20	0.21.24	0.22,32	0.23.46	0.24.44	0.25.50	0.27. 0	0.28.12	0.29.24	0.30.40
14	0.22. 0	0.23. 8	0.24.20	0.25.28	0.26.44	0.27.54	0.29.12	0.30.28	0,31.44	0.33. 8
15	0.23.40	0.24.52	0.26. 8	0.27.20	0.28.44	0.30. 2	0.31.24	0.32.44	0.34. 8	0.35.36
16	0.25.16	0.26.36	0.27.56	0.29.20	0.30.44	0.32.10	0.33.36	0.35. 4	0.36.32	0.38. 8
17	0.26.56	0.28.24	0.29.48	0.31.16	0.32.44	0.34.18	0.35.52	0.37.34	0.39. 0	0.40.40
18	0.28.40	0.30.12	0.31.44	0 33.16	0.34.52	0.36.28	0.38. 8	0.39.45	0.41.32	0.43.16
19	0.30.24	0.32. 0	0.33.36	0.35.16	0.36.56	0.38.38	0.40.24	0.42.12	0 44. 0	0.45.42
20	0.32. 8	0.33 48	0.35.32	0.37.16	0.39. 4	0.40.54	0.42.44	0.44.36	0.46.32	0.48.32
21	0.33.52	0.35.40	0.37.32	0.39.20	0 41.16	0.43.10	0.45. 8	0.47. 4	0.49. 8	0.51.12
22	0.35.40	0.37.36	0.39.32	0.41.28	0.42 28	0.45.26	0.47.32	0.49.36	0.51.44	0.53.56
23	0.37.28	0.39.32	0.41.32	0.43.36	0.45.46	0.47.46	0.49.56	0.52.12	0.54.28	0,56.44
24	0.39.20	0.41.28	0.43.36	0.45.44	0.47.56	0.50.10	0.52.28	0.54.48	0.57.12	1.59.36
25	0.41.16	0.43.28	0.45.40	0.47.56	0.50,16	0.52.34	0.55. 0	0.57.24	0.59.56	1. 2.28
26	0.43.12	0.45.28	0.47.48	0.50.12	0.52.36	0.55. 2	0.57.32	1. 0. 8	1. 2 44	1. 5.24
27	0.45. 8	0.47.32	0.49.56	0.52.28	0. 55 0	0.57.30	1. 0.12	1, 2.52	1. 5.36	1. 8.24
28	0.47. 8	0.49.36	0.52,12	0.54.48	0.57.28	1. 0. 6	1. 2.52	1. 5.40	1, 8.32	1.11.32
29	0.49. 8	0.51.44	0.54.28	0.57. 8	0.59.56	1. 2.42	1. 5.36	1. 8.32	1.11.36	1.14.40
30	0.51.12	0.53.56	0.56.44	0.59.36	1. 2.28	1. 5.22	1. 8.24	1.11.32	1.14.40	1.17.52
31	0.53.20	0.56.12	0.59. 8	1. 2. 4	1. 5 4	1. 8 6	1.11.20	1.14.32	1.17.48	1.21.12
32	0.55.32	0.58.28	0. 1.32	1. 4.36	1. 7.36	1,10.58	1.14.16	1.17.36	1.21. 4	1.24.36

Tabu-

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Tabula Differentiarum A ſcenſionalium.

Altitudines Poli.

Declinatio Stellæ.

G	31	32	33	34	35	36	37	38	39	40
	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
1	0. 2.24	0. 2.28	0. 2.36	0. 2.40	0. 2.48	0. 2.56	0. 3. 0	0. 3. 8	0. 3.16	0. 3.20
2	0. 4.48	0. 5. 0	0. 5.12	0. 5.24	9. 5.36	0. 5.48	0. 6. 4	0. 6.16	0. 6.28	0. 6.40
3	0. 7.12	0. 7.32	0. 7.48	0. 8. 8	0. 8.24	0. 8.44	0. 9. 4	0. 9.24	0. 9.44	0 16. 4
4	0. 9.36	0.10. 0	0.10.24	0.10.48	0.11.12	0.11.40	0.12. 4	0.12.32	0,13. 0	0.13.28
5	0.12. 4	0.13.32	0.13. 0	0.13.32	0.14. 4	0.14.36	0.15. 8	0.15.40	0.16.16	0,16.52
6	0.14.28	0.15 4	0.15.40	0.16.16	0.16 52	0.17.32	0.18.12	0.18.52	0.19.33	0 20.16
7	0.16.56	0 17.56	0.18.16	0.19. 0	0.19.44	0.20.28	0.21.16	0.22. 0	0.22.48	0.23.40
8	0.19.24	0.20. 8	0.20.56	0.21 44	0.22.36	0.23.28	0.24.20	0.25.12	0.26. 8	0.27. 4
9	0.21.52	0.22.44	0.23.36	0.24.32	0.25.28	0.26.28	0.27.24	0.28.24	0.29.28	0,30.22
10	0.24.20	0.25.20	0.26.20	0.27.20	0.28.24	0.29.28	0.30.32	0.31.40	0 32.52	0.34. 0
11	0.26.48	0.27.56	0.29. 0	0.30. 8	0.31.16	0.32.28	0.33.40	0.34.50	0.36.12	0.37 32
12	0.29.20	0.30.32	0.31.44	0.33. 0	0.34.16	0.35.32	0.36.52	0.38.16	0.39.40	0.41, 4
13	0.31.52	0.33.12	0.34.28	0.35.58	0.37.12	0.38.36	0.40. 4	0.41.36	0.42. 4	0.44.40
14	0.34.28	0.35.52	0.37.16	0.38.44	0.40.12	0.41.44	0.43.20	0 44.56	0.46.36	0.48.20
15	0.37. 4	0.38.32	0.40. 4	0.41.40	0.43.16	0.44.56	0.46.36	0.48.20	0.50. 8	0.52. 0
16	0.39.40	0.41.16	0.42.56	0.44.36	0.46.20	0.48. 8	0.49.56	0.51.48	0.53.44	0.55.40
17	0.42.20	0.44. 4	0.45.48	0.47.36	0.49.28	0.51.20	0.53.16	0.55.16	0.57.20	0 59.28
18	0.45. 4	0.46.52	0.48.44	0.50.40	0.52.36	0.54 36	0.56.40	0.58.48	1. 1. 0	1, 3.16
19	0.47.48	0 49.40	0.51.40	0.53 44	0.55.48	0.57.56	1. 0. 8	1. 2.24	1. 4.44	1. 7.12
20	0.50.32	0.52.36	0.54.40	0.59.52	0.59. 4	1. 1.20	1. 3.40	1. 6. 4	1. 8.32	1.11. 8
21	0.53.20	0.55.32	0.57.44	1. 0. 0	1. 2.24	1. 4.48	1. 7.16	1. 9.48	1.12.28	1.15. 8
22	0.56.12	0.58.28	1. 0,52	1. 3.16	1. 5.44	1. 8.20	1.10.52	1.13.36	1.16.24	1.19.16
23	0 59. 8	1. 1.32	1. 4. 0	1. 6.32	1. 9. 8	1.11.52	1.14.36	1.17 28	1.20.24	1.23.28
24	1. 2. 4	1. 4.36	1. 7.12	1. 9.56	1.12.40	1.15.21	1.18.24	1.21.24	1.24 32	1.27.44
25	1. 5. 4	1. 7,44	1.10.33	1.13.20	1.16.12	1.19.12	1.22.11	1.25.24	1.28.44	1.32. 8
26	1. 8. 8	1.11. 0	1.13.52	1.16.48	1.19.42	1.23. 0	1.26.16	1.30.36	1.33. 4	1,36.40
27	1.11.20	1.14.16	1.17.16	1.20.24	1.23.36	1.26.56	1.30.20	1.33.52	1.37.28	1.41.16
28	1.14.32	1.17.36	1.20.48	1.24. 4	1.27.24	1.30.52	1.34.28	1.38.12	1.42. 0	1.46. 0
29	1.17.48	1.21. 4	1.24.24	1.27.48	1.31.20	1.35. 0	1.38.48	1.42.40	1.46.40	1.50.52
30	1.21.12	1.24.36	1 28. 4	1.31.40	1.35.24	1.39.12	1.43. 4	1.47.16	1.51.28	1.55.56
31	1.24.40	1.28.12	1.31.52	1.35.40	1.39.32	1.43.32	1.46.40	1.52. 0	1.56.28	2. 1.48
32	1.28.12	1.31.56	1.35.44	1.39.44	1.43.48	1.48. 0	1.52,20	1.56.52	2. 1.36	2. 6.28

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Tabula Differentiarum Aſcenſionalium.

Altitudines Poli.

	41	42	43	44	45	46	47	48	49	50
G	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.II.I.	H.II.I.	H.I.II.	H.I.II.
1	0. 3.28	0. 3.36	0. 3.44	0. 3.52	0. 4. 0	0. 4. 8	0. 4.16	0. 4.28	0. 4.36	0. 4.48
2	0. 6.36	0. 7.12	0. 7.28	0. 7.44	0. 8. 0	0. 8.16	0. 8.36	0. 8.52	0. 9.12	0. 9.32
3	0.10.28	0.10.48	0.11.12	0.11.36	0.12. 0	0.12.28	0.12.52	0.13.20	0.13.48	0.14.20
4	0.13.56	0.14.28	0.14.56	0.15.28	0.16. 4	0.16.36	0.17.12	0.17.48	0.18.28	0.19. 8
5	0.17.28	0.18. 4	0.18.44	0.19.24	0.20. 4	0.20.48	0.21.32	0.22.20	0.23. 8	0.23.56
6	0.21. 0	0.21.44	0.22.28	0.23.20	0.24. 8	0.25. 0	0.25.52	0.26.48	0.27.48	0.28.48
7	0.24.32	0.25.24	0.26.16	0.27.16	0.28.12	0.29.12	0.30.16	0.31.20	0.32.28	0.33.40
8	0.28. 4	0.29. 4	0.30. 8	0.31.12	0.32.20	0.33.28	0.34.40	0.35. 6	0.37.12	0.38.32
9	0.31.40	0.32.48	0.34. 0	0.35.12	0.36.28	0.37.44	0.39. 8	0.40.32	0.42. 0	0.43 32
10	0.35.16	0.36.32	0.37.57	0.39.12	0.40.36	0.42. 4	0.43.36	0.45.12	0.46.48	0.48.32
11	0.38.56	0.40.20	0.41.48	0.43.16	0.44.52	0.46.28	0.48. 8	0.49.52	0.51.40	0.53.36
12	0.42.36	0.44. 8	0.45.44	0.47.24	0.49. 4	0.50.52	0.52.44	0.54.36	0.56.36	0.58.40
13	0 46.20	0.48. 0	0.49.44	0.51.32	0.53.24	0.55.20	0.57.20	0.59.24	1. 1.36	1. 3.52
14	0.50. 4	0.51.52	0.53.48	0.55.44	0.57.44	0.59.52	1. 2. 0	1. 4.20	1. 6.40	1. 9. 8
15	0.53.52	0.55.52	0.57.52	1. 0. 0	1. 2. 8	1. 4.28	1. 6.48	1. 9.16	1.11.48	1.14 28
16	0.57.44	0.59.52	1. 2. 4	1. 4.20	1. 6.40	1. 9. 4	1.11.36	1.14.16	1.17. 4	1.19.56
17	1. 1.40	1. 3.56	1. 6.16	1. 8.40	1.11.12	1.13.48	1.16.32	1.19.24	1.22.24	1.25.28
18	1. 5.26	1. 8. 4	1.10.32	1.13. 8	1.15.52	1.18.40	1.21.32	1.24 36	1.27.48	1.31. 8
19	1. 9.40	1.12.16	1.14.56	1.17.40	1.20.36	1.23.32	1.26.40	1.29.56	1.33.20	1.36.56
20	1.13.48	1.16.32	1.18.20	1.22.20	1.25.24	1.28.32	1.31.52	1.35.24	1.39. 0	1.42.48
21	1.18. 0	1.20.52	1.23.56	1.27. 4	1.30.16	1.33.40	1.37.12	1.40.56	1.44.48	1.48.56
22	1.22.16	1.25.20	1.28.32	1.31.52	1.35.20	1.38.56	1.42.40	1.46.44	1.50.48	1.55. 8
23	1.26.36	1.29.52	1.33.16	1.36.48	1.40.28	1.44.20	1.48.20	1.52.32	1.56.56	2. 1.32
24	1.31. 4	1.34.32	1.38. 8	1.41.52	1.45.44	1.49.48	1.54. 4	1.58.12	2. 3.12	2. 8.12
25	1.35.40	1.39.20	1.42. 8	1.47. 4	1.51.12	1.55.28	2. 0. 0	2. 4.48	2. 9.44	2 15. 4
26	1.40.20	1.44.12	1.48.12	1.52.24	1.56.44	2. 1.20	2. 6. 8	2.10.52	2.16.32	2.22. 8
27	1.45. 8	1.49.12	1.53.28	1.57.56	2. 2.32	2. 7.24	2.12.28	2.17.52	2.23.32	2.29.32
28	1.50. 4	1.54.24	1.58.56	2. 3.36	2. 8.28	2.13.40	2.19. 4	2.24.38	2.30.52	2.37.16
29	1.55.12	1.59.42	2. 4.32	2. 9.28	2.14.40	2.20. 8	2.25.52	2.32. 0	2.38.28	2.44.24
30	2. 0.28	2. 5.16	2.10.20	2.15.32	2.21. 4	2.26.52	2.33. 0	2.39.32	2.46.28	2.53.56
31	2. 5.56	2.11. 0	2.16.16	2.22.52	2.27.44	2.33.56	2.40.28	2.47.27	2.54.56	3. 2.56
32	2.11.36	2.16.56	2.22.32	2.27.28	2.34.40	2.41.16	2.48.16	2.55.48	3. 3.48	3.12.32

Declinatio Stellæ.

Tabu-

Tabula Differentiarum Aſcenſionalium.

Altitudines Poli.

Declinatio Stellæ.

G	51 H.I.II.	52 H.I.II.	53 H.I.II.	54 H.I.II.	55 H.I.II.
1	0. 4.56	0. 5. 8	0. 5.20	0. 5.32	0. 5.44
2	0. 9.52	0.10.16	0.10.36	0.11. 0	0.11.24
3	0.14.52	0.15.24	0.15.56	0.16.32	0.17. 8
4	0.19.48	0.20.32	0.21.10	0.22. 4	0.22.56
5	0.24.48	0.25.44	0.26.40	0.27.40	0.28.44
6	0.29.48	0.30.56	0.32. 4	0.33.20	0.34.32
7	0.34.52	0.36. 8	0.37.32	0.38.56	0.40.24
8	0.40. 0	0.41.28	0.43. 0	0.44.36	0.46.20
9	0.45. 8	0.46.48	0.48.32	0.50.20	0.52.16
10	0.50.20	0.52.12	0.54. 8	0.56.12	0.58.20
11	0.55.32	0.57.36	0.59.48	1. 2. 4	1. 4.28
12	1. 0.52	1. 3. 8	1. 5.32	1. 8. 0	1.10.40
13	1. 6.10	1 8.44	1.11.20	1.14. 8	1.17. 0
14	1.11.44	1.14.28	1.17.16	1.20.16	1.23.28
15	1.17.16	1.20.16	1.23.20	1.26.32	1.30. 0
16	1.22.56	1.26. 8	1.29.28	1.33. 0	1.36.40
17	1.28.44	1.32. 8	1.34.44	1.39.32	1.43.32
18	1.34.36	1.38.16	1.42.12	1.46.16	1.50.36
19	1.40.40	1.44.36	1.48.44	1.53. 8	1.57.48
20	1.46.52	1.51. 4	1.55.32	2. 0.16	2. 5.16
21	1.53.12	1.57.44	2. 2.28	2. 7.36	2.13. 0
22	1.59.44	2. 4.32	2. 9.40	2.15. 8	2.20.56
23	2. 6.28	2.11.36	2.17. 8	2.23. 0	2.29.16
24	2.13.24	2.18.56	2.24.52	2.31.12	2.37.56
25	2.20.40	2.26.36	2.32.56	2.39.56	2.47. 0
26	2.28. 8	2.34.32	2.41.20	2.48.40	2.56.36
27	2.36. 0	2.42.48	2.50.12	2.58. 8	3. 6.44
28	2.44. 8	2.51.32	2.59.32	3. 8. 8	3.17.36
29	2.52.48	3. 0.48	3. 9.24	3.18.56	3.29.20
30	3. 1.56	3.10.36	3.20. 4	3.30.28	3.42. 8
31	3.11.36	3.21. 4	3.31.32	3.43.12	3.56.24
32	3.22. 0	3.32.28	3.44. 4	3.57.16	4.12.40

Tabula Poſitionum Generalis.

Gradus eleuationum Poli ſupra circulum Poſitionis.

Gradus Altitudinis Poli locorum.

	1	2	3	4	5	6	7	8	9	10
	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.II.I.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
38	0. 5. 8	0.10.16	0.15.24	0.20.32	0.25.44	0.30.56	0.36. 8	0.41.28	0.46.48	0.52.12
39	0. 4.56	0. 9.52	0.14.52	0.19.48	0.24.48	0.29.48	0.34.52	0.40. 0	0.45. 8	0.50.20
40	0. 4.48	0. 9.32	0.14.20	0.19. 8	0.23.56	0 28.48	0.33.40	0.38.32	0.43 32	0.48.32
41	0. 4.36	0. 9.12	0.13.48	0.18.28	0.23. 8	0.27.48	0.32.28	0.37.12	0 42. 0	0.46.48
42	0. 4. 8	0. 8.52	0.13.20	0.17.48	0. 22.0	0.26.48	0.31.20	0.35.56	0.40.32	0.45.12
43	0. 4.16	0. 8.36	0.12.52	0.17.12	0.21.32	0.25.52	0.30.16	0.34.40	0.39. 8	0.43.36
44	0. 4. 8	0. 8.16	0.12.28	0.16.36	0.20.48	0.25. 0	0.29.12	0.33.28	0.37.44	0.42. 4
45	0. 4. 0	0. 8. 0	0.12. 0	0.16. 4	0.20. 4	0.24. 8	0.28.12	0.32.20	0.36.28	0.40.36
46	0. 3.52	0. 7.44	0.11.36	0.15.28	0.19.24	0.23.20	0.27.16	0.31.12	0.35.12	0.39.12
47	0. 3.44	0. 7.28	0.11.12	0.14.56	0.18.44	0.22.28	0.26.16	0.30. 8	0.34. 0	0.37.52
48	0. 3.36	0. 7.12	0.10.48	0.14.28	0.18. 4	0.21.44	0.25.24	0.29. 4	0.32.48	0.36.32
49	0. 3.28	0. 6.56	0.10.28	0.13.56	0.17.28	0.21. 0	0.24.32	0.28. 4	0.31.40	0.35.16
50	0. 3.20	0. 6.40	0.10. 4	0.13.28	0.16.52	0.20.16	0.23.40	0.27. 4	0.30.32	0.34. 0
51	0. 3.16	0. 6.28	0. 9.44	0.13. 0	0.16.16	0.19.32	0.22.48	0.26. 8	0 29.28	0.32.58
52	0. 3. 8	0. 6.16	0. 9.24	0.12.32	0.15.40	0.18.52	0.22. 0	0.25.12	0.28.24	0.31.40
53	0. 3. 0	0. 6. 4	0. 9. 4	0.12. 4	0.15. 8	0.18.12	0.21 16	0.24.20	0.27.24	0.30.32
54	0. 2.56	0. 5 48	0. 8.44	0.11.40	0.14.36	0.17.32	0.20.28	0.23.28	0.26.28	0.29.28
55	0. 2.48	0. 5.36	0. 8.24	0 11.12	0.14. 4	0.16.52	0.19.44	0.22.30	0.25.28	0.28.24

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Tabula Poſitionum Generalis.

Gradus eleuationum Poli ſupra circulum Poſitionis.

Gradus Altitudinis Poli locorum.

	11	12	13	14	15	16	17	18	19	20
	H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*
38	0.57.36	1. 3. 8	1. 8.44	1.14.28	1 20.16	1.26. 8	1.32. 8	1 38.16	1.44.36	1.51. 4
39	0.55.32	1. 0.52	1. 6.16	1.11.44	1.17.16	1.22,56	1.28.44	1.34.36	1.40.40	1.46.52
40	0.53.36	0.58.40	1. 3.52	1. 9. 8	1.14.28	1.19.56	1.25.28	1.31. 8	1.36.56	1.42.49
41	0.51.40	0.56.36	1. 1.36	1. 6.40	1.11.48	1.17. 4	1.22.24	1.27.48	1.33.20	1.39. 0
42	0.49.52	0.54.36	0.59.24	1. 4 20	1. 9.16	1.14.16	1.19.24	1.24.36	1.29.46	1.35.24
43	0.48. 8	0.52.44	0.57.20	1. 2. 0	1. 6.48	1.11.36	1.16.32	1.21.32	1.26.40	1.31.52
44	0.46.28	0.50.52	0.55.20	0.59.52	1. 4.28	1. 9. 4	1.13.48	1.18.40	1.23.32	1.28.52
45	0 44.52	0.49. 4	0 53.24	0.57.44	1 2. 8	1. 6.40	1.11.12	1.15.52	1.20.36	1.25.24
46	0.43.16	0.47.24	0.51.32	0.55.44	1. 0. 0	1. 4.20	1. 8.40	1.13. 8	1.17.40	1.22.20
47	0.41.48	0.45.44	0 49.44	0 53.48	0.57.52	1. 2. 4	1. 6.16	1.10.32	1.14.56	1.18.20
48	0.40 20	0.44. 8	0.48. 0	0.51.52	0.55.52	0.59.52	1. 3.56	1. 8. 4	1.12.16	1.16.32
49	0.38.56	0.42.36	0.46.20	0.50. 4	8.53.52	0.57.44	1. 1.40	1. 5.36	1. 9.40	1.13.48
50	0.37.32	0.41. 4	0.44.40	0.48.20	0.52. 0	0.55.40	0.59.28	1. 3.16	1. 7.12	1.11. 8
51	0.36.12	0.39.40	0 42. 4	0.46.36	0.50. 8	0.53.44	0.57.20	1. 1. 0	1. 4.44	1. 8.32
52	0.34.56	0 38.16	0.41.36	0.44.56	0.48.20	0.52.48	0.55.16	0.58.48	1. 2.24	1. 6. 4
53	0.33.40	0.36.52	0.40. 4	0.43.20	0.46.36	0.49.56	0.53.16	0.56.40	1. 0. 8	1. 3.40
54	0.32.28	0.35.32	0.38.36	0.41.44	0.44.56	0.48. 8	0.51.20	0.54.36	0.57.56	1. 1.20
55	0.31.16	0.34.16	0.37.12	0.40.12	0.43.16	0.46.20	0.49.28	0.52.36	0 55.48	0.59. 4

Tabula Poſitionum Generalis.

Gradus Altitudinis Poli locorum.	Gradus eleuationum Poli ſupra circulum Poſitionis.									
	21	22	23	24	25	26	27	28	29	30
	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
38	1.57.44	2. 4.32	2.11.36	2.18.56	2.26.36	2.34.32	2.42.48	2.51.32	3. 0.48	3.10.36
39	1.53.12	1.59.44	2. 6.28	2.13.24	2.20.40	2.28. 8	2.36. 0	2.44. 8	2.52.48	3.1. 56
40	1.48.56	1.55. 8	2. 1.33	2. 8.12	2.15. 4	2.22. 8	2.29.32	2.37. 6	2.45.24	2.53.56
41	1.44.48	1.50.48	1.56.56	2. 3.12	2. 9.44	2.16.32	2.23.32	2.30.52	2.38.28	2.46.28
42	1.40.56	1.46.40	1.52.32	1.58.12	2. 4.48	2.10.12	2.17.52	2.24.48	2.32. 0	2.39.32
43	1.37.12	1.42.40	1.48.20	1.54. 4	2. 0. 0	2. 6. 8	2.12.28	2.19. 4	2.25.52	2.33. 0
44	1.33.40	1.38.56	1.44.20	1.49.48	1.55.28	2. 1.20	2. 7.24	2.13.40	2.20. 8	2.26.52
45	1.30.16	1.35.20	1.40.28	1.45.44	1.51.12	1.56.44	2. 2.32	2. 8.28	2. 4.40	2.21. 4
46	1.27. 4	1.31.52	1.36.48	1.41.52	1.47. 4	1.52.24	1.57.56	2. 3.36	2. 9.27	2.15.32
47	1.23.56	1.28.32	1.33.16	1.38. 8	1.43. 8	1.48.12	1.53.28	1.58.56	2. 4.32	2.10.20
48	1.20.52	1.25.20	1.29.52	1.34.32	1.39.20	1.44.12	1.49.12	1.54.24	1.59.44	2. 5.16
49	1.18. 0	1.22.16	1.26.36	1.31. 4	1.35.40	1.40.20	1.45. 9	1.50. 4	1.55.12	2. 0.28
50	1.15. 8	1.19.16	1.23.28	1.27.44	1.32. 8	1.36.40	1.41.16	1.46. 0	1.50.52	1.55.56
51	1.12.28	1.16.24	1.20.24	1.24.32	1.28.44	1.33. 4	1.37.28	1.42. 0	1.46.40	1.51.28
52	1. 9.48	1.13.36	1.17.28	1.21.24	1.25.24	1.30.36	1.33.52	1.38.12	1.42.40	1.47.16
53	1. 7.16	1.10.52	1.14.36	1.18.24	1.22.16	1.26.16	1.30.20	1.34.28	1.38.44	1.43. 8
54	1. 4.48	1. 8.20	1.11.52	1.15.28	1.19.12	1.23. 0	1.26.56	1.30.52	1.35. 0	1.39.12
55	1. 2.24	1. 5.44	1. 9. 8	1.11.40	1.16.12	1.19.52	1.23.36	1.27.24	1.31.20	1.35.24

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Tabula Poſitionum Generalis.

Gradus eleuationum Poli ſupra circulum Poſitionis.

Gradus Altitudinis Poli locorum.

	31	32	33	34	35	36	37	38	39	40
	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
38	3.21. 4	3.32.28	3.44.52	3.58.48	4.14.20	4.33.40	4.58.44	6. 0. 0		
39	3.11.36	3.22. 0	3.33.16	3.45.36	3.59.24	4.15.12	4.34. 8	4.50. 0	6. 0. 0	
40	3. 2.56	3.12.32	3.22.52	3.34. 0	3.46.16	3.59.56	4.15.36	4.34.28	4.59.16	6. 0. 0
41	2.54.56	3. 3.48	3.13.20	3.23.32	3.34 40	3.46.48	4. 0.24	4.16. 0	4.34.44	4.59.36
42	2.47.28	2.55.48	3. 4. 8	3.14. 4	3.24.12	3.35.12	3.47.16	4. 0.48	4.16.16	4.34.56
43	2.40.28	2.48.16	2.56.32	3. 5.20	3.14.40	3.24.44	3.35.40	3.47.40	4. 4. 4	4.16.32
44	2.33.56	2.41.16	2.49. 0	2.57.12	3. 5.56	3.15.12	3.25. 8	3.36. 0	3.47.50	4. 1.20
45	2.27.44	2.34.40	2.42. 0	2.49.40	2.57.48	3. 5.56	3.15.36	3.25.32	3.36.16	3.48.12
46	2.21.52	2.27.28	2 35.20	2.42.36	2.50.12	2.58.12	3. 6.48	3.15.56	3.25.48	3.36.32
47	2.16.16	2.22.32	2.29. 4	2.35.56	2.43. 4	2.50.36	2.58.36	3. 7. 4	3.16. 8	3.25.56
48	2.11. 0	2.16.56	2.23. 8	2.29.36	2.36.20	2.43.24	2.50.56	2.58.48	3. 7.16	3.16.16
49	2. 5.56	2.11.36	2.17.28	2.23.36	2.30. 0	2.36.40	2.43.40	2.51. 8	2.59. 0	3. 7.20
50	2. 1.48	2. 6.28	2.12. 4	2.17.52	2.23.56	2.30.16	2.36.52	2.43.52	2.51.12	2.59. 0
51	1.56.28	2. 1.36	2. 6.56	2.12.24	2.18.12	2.24. 8	2.30.24	2.37. 0	2.43.56	2.51.12
52	1.52. 0	1.56.52	2. 1.16	2. 7.12	2.12.40	2.18.20	2.24.10	2.30.28	2.37. 0	2.43.12
53	1.47.40	1.52.20	1.57.12	2. 2.12	2. 7.24	2.12.48	2.18.24	2.24.16	2.30.24	2.36.52
54	1.43.32	1.48 0	1.52.36	1.57.24	2. 2.20	2. 7.28	2.12.48	2.18.20	2.24. 8	2.30.16
55	1.39.32	1.43.48	1.48.12	1.52.44	1.57.28	2. 2.20	2. 7.24	2.12.40	2.18.12	2.23.56

Tabula Poſitionum Generalis.

Gradus eleuationum Poli ſupra circulum Poſitionis.

Gradus Altitudinis Poli locorum.

	41	42	43	44	45	46	47	48	49	50
	H.I.II.	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.I.II.*	*H.II.I.*	*H.I.II.*	*H.I.II.*	*H.I.II.*
41	6. 0. 0									
42	4.59.24	6. 0. 0								
43	4.35.12	4.59.40	6. 0. 0							
44	4.16.44	4.34.40	4.59.44	6. 0. 0						
45	4. 1 32	4.16.52	4.35.44	4.59 48	6. 0. 0					
46	3.48.20	4. 1.36	4.16.56	4.35.24	4.59.48	6. 0. 0				
47	3.36.40	3.48.24	4. 1.40	4.16.56	4.35.20	4.59.34	6. 0. 0			
48	3.26. 4	3.36.40	3.48.24	4. 1.36	4.16.52	4.35.12	4.59.40	6. 0. 0		
49	3.16.20	3.25.56	3.36.40	3.48.20	4. 1.32	4.16.44	4.35. 8	4.59 36	6. 0. 0	
50	3. 7.20	3.16.16	3.25.56	3.36.32	3.48.12	4. 1. 0	4.16.32	4.34.56	4 59.24	6. 0. 0
51	2.59. 0	3. 7.16	3.16. 8	3.25.48	3.36.16	3.47.56	3.57. 4	4.16.16	4.34.44	4.59.16
52	2.51. 8	2.58.48	3. 7. 4	3.15.56	3.25.32	3.36. 0	3.47.40	4. 0.48	4.16. 0	4.34.28
53	2.43. 0	2.50.56	2.58.36	3. 6.48	3.15.36	3.25. 8	3.35.40	3.47.16	4. 0.24	4.15.36
54	2.36.40	2.43.24	2.50.36	2.58.12	3. 6.24	3.15.12	3.24.44	3.35.12	3.46.48	3.59.56
55	2.30. 0	2.36.20	2.43. 4	2.50.12	2.57.48	3. 5.56	3.14.40	3.24.12	3.34.40	3.40.16

Tabu-

Tabula Poſitionum Generalis.

Gradus eleuationum Poli ſupra circulum Poſitionis.

Gradus Altitudinis Poli locorum.

	51	52	53	54	55
	H.I.II.	H.I.II.	H.I.II.	H.I.II.	H.I.II.
51	6. 0. 0				
52	4.59. 0	6. 0. 0			
53	4.34. 8	4.58.48	6. 0. 0		
54	4.15.12	4.33.40	4.58.28	6. 0. 0	
55	3.59.24	4.14.40	4.33.16	4.58. 0	6. 0. 0

Finis Tabulæ Poſitionum Generalis.

Lector Beneuole. *Antequàm vtare Tabulis huiuſce primæ partis ad calculos inſtituendos, ne graueris inſigniora aliquot earum menda calamo ſic corrigere.*

	Errata.	*Correctiones.*
Pag. 269. in fronte Tabulæ	Horæ 6.	Horæ 4.
Pag. 285. in fronte	Horæ 22.	Horæ 12.
295. in fronte	Horæ 18.	Horæ 17.
302. & 303. in fronte	Horæ 11.	Horæ 21.
311. iuxtà dextram Columnam	Declinatio Meridiana	Declinatio Septemtrionalis.
Pag. 320. in calce Tabulæ	Horæ 31.	Horæ 13.
323. in calce	Horæ 21.	Horæ 20.
381. in calce	Horæ 11.	Horæ 13.

Pro reliquis Tabularum erroribus corrigendis vtere ſequenti Methodo.

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Animaduerſiones pro Erratorum Caſtigatione.

HOminum errare eſt, atquè vt ſuadet experientia, quò profundiùs agunt, eò faciliùs labuntur: quamobrèm humanam imbecillitatem, quæ contigit, non bonæ diligentiſque Voluntatis defectum, reparaturi, pro erratorum correctione, ſiuè malè comparentium, aùt non exiſtentium numerorum cognitione, iterùm Dominos *Candidatos* precamur exactæ memoriæ mandare, quæ etiàm animaduertenda poſuimus in fine aliarum noſtrarum Ephemeridum ab Anno 1674. ad Annum 1685. & ab Anno 1685. ad 1711, vt ſiquidèm dignentur errores emendare mediantibus terminis proportionum in ſubiecta materia percurrentium, & pro quorum intelligentia denuò libentèr alia ſubnectimus exempla, ac extenſiores declarationes cùm ſequentium caſuum diſtinctione, in quibus tamen omnibus cognoſcetur medijs ſemper differentiarum proportionibus an numeri ſint errati, malè apparentes, vel deficientes, cuius quantitatis eſſe debeant, ſimileſque erunt operationes.

Cum ergò dubium erit an aliqui numeri ſint errati, aut ſint non benè apparentes, ſiuè deficientes, ſumentur differentiæ intèr aliquos numeros antecedentes, & ſubſequentes numerum, de quo difficultas eſt, & vt ſuprà, ac ſi differentiæ erunt inter ſe æquales, non habità conſideratione, quòd augeantur, vel decreſcant, vt potius, vnico minuto, ſignum erit numeros non eſſe erratos, differentiæ itèm ipſæ, intèr ſe congruentes addantur, vel ſubtrahantur, reſpectiuè ſecundùm ſubiectam materiam, numeris apparentibus, & proſilient veri numeri non apparentes, & huiuſmodi numeri deficientes, & ecce horum omnium exempla.

In Tabula Domorum cœleſtium dubito, an portio Zodiaci, ſub columna Horoſcopi, aſſignata horis 22. & min. 4. Aſcenſionis rectæ medij cœli ſit vera, quæ pag. 304. datur ♒ gr. 26. min. 32. elicio igi-

tur differentias numerorum antecedentium minut. 4. & ſubſequentium proùt ſequitur videlicet.

Horoſcopi.

♊

Minuta rectæ Aſcenſionis			*Differentiæ*
0.	25.	35.	15.
1.	25.	50.	14.
2.	26.	4.	14.
3.	26.	18.	14.
4.	26.	32.	15.
5.	36.	47.	14.
6.	27.	1.	14.
7.	27.	15.	14.
8.	27.	29.	

Et quia differentiæ, vt aſpicitur, intrà minutum, ſunt inter ſe æquales, ſignum eſt numeros gr. 26. min. 32. ♊ aſſignatos, vt ſuprà, non eſſe erratos.

Ambigitur iterùm an numeri aſſignati pag. 311. in Tabula poſitionum, & directionum gradibus 9. declinationis Septemtrionalis ſuprà terram, & Meridianę ſub terra, & aſſignati h. 3. 28. 20. ſub circulo poſitionis gr. 35. ſint errati. colligantur differentiæ, vt ſuprà factum fuit, & proùt infrà ſequuntur.

35

		H.	I.	II.	Differentia I.	II.
Declinationes	12.	3.	36.	8.	3.	0.
	11.	3.	33.	8.	2.	52.
	10.	3.	30.	16.	1.	56.
	9.	3.	28.	20.	3.	52.
	8.	3.	24.	28.	2.	52.
	7.	3.	21.	36.	2.	52.
	6.	3.	18.	44.		

Quoniàm igitùr turbantur differentiæ à numeris propoſitis, cæteræque decreſcunt, indicium erit numeros 3. 28. 20. eſſe erratos, & pro eorumdem emendatione ſubtrahantur (nàm decreſcunt numeri columnæ) 2. 52. à ſuperiori 3. 30. 16. & remanebunt correctæ h. 3. m. 27. 24. prò declinatione gr. 9. & circulo poſitionis gr. 35. atquè cum eiſdem denuò ſeiungantur differentiæ, & cognoſcentur inter ſe æquales intrà minutum, hiſce namquè, ac ſimilibus in Tabulis quatuor ſecundæ æquipollent vni minuto.

Huiuſcemodi per motus diurnos antecedentes, ac ſubſequentes loca Planetarum in longum, & in latum corriguntur.

Ac quò ad aſpectus recurrendum eſt ad punctum 79. pag. 169. & ad punctum 80. pag. 173.

Epilogiſmus Punctorum.

Punctum		Pag.
1	*DE Aſtronomicis ſummis*	1.
2	*De Aſtronomica ſubtractione*	3.
3	*De Aſtronomica multiplicatione*	4.
4	*De Aſtronomica diuiſione*	6.
5	*Quartum proportionalem inuenire*	11.
6	*De Parte proportionali*	12.
7	*De radicum extractionibus*	14.
8	*De probationibus operationum*	ibid.
9	*Trigonometriæ definitiones*	15.
10	*De logoritbmis*	20.
11	*De aliis præcognitionibus*	31.
12	*De Sphæræ nomine*	32.
13	*De circulis Sphæræ maximis &c.*	ibid.
14	*De Circulo Horizontis*	34.
15	*De Circulo Meridiani*	38.
16	*De linea Meridiana, & Horizontali &c.*	41.
17	*De Æquinoctiali Circulo*	46.
18	*De Zodiaco, & Ecliptica*	48.
19	*Longitudines Planetarum ſupputare*	59.
20	*Latitudines Planetarum ſupputare*	61.
21	*De Coluris*	66.
22	*De aliis Sphæræ maximis circulis*	67.
23	*De altitudine Poli, & Æquatoris*	68.
24	*Declinationes Stellarum inuenire*	71.
25	*Tempus in gradus Æquat: conuertere &c.*	77.
26	*Rectam Stellarum Aſcenſionem indagare*	ibid.
27	*Cæli mediationes inuenire*	79.
28	*Obliquam Stellarum Aſcenſionem numerare*	81.
29	*Rectam, & obliquam deſcenſionem inquirere*	84.
30	*Aſcenſiones per Sphæram demonſtrare*	ibid.
31	*De Arcu ſemidiurno*	85.
32	*Datum Tempus reducere ad Aſtronomicum*	86.
33	*De recta medii Cæli Aſcenſione &c.*	87.

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Punct.		Pag.
34	*De Circulis Domorum Cœleſtium*	88.
35	*De Domibus Cœleſtibus ad alias Poli eleuationes*	100.
36	*De Circulis Poſitionis ad latit. gr. 44. 29.*	103.
37	*De eiſdem ad alias Poli eleuationes*	106.
38	*De Ortu, & Meridie Stellarum &c.*	112.
39	*De earum diſtantia à Meridiano inuenienda*	113.
40	*De altitudine, & diſtantia à Vertice*	ibid.
41	*De Stellarum depreſſione*	115.
42	*De Angulo Verticalis cum Meridiano*	116.
43	*De Circulis minoribus*	ibid.
44	*De Zonis*	118.
45	*De Climatibus*	120.
46	*De diuerſis Mundi Habitatoribus*	122.
47	*De dierum naturalium Æquatione*	ibid.
48	*De menſura Vmbrarum ex Sole*	124.
49	*De Planorum declinatione inuenienda*	125.
50	*Vmbrarum menſura in Planis ad Meridiem*	128.
51	*Eædem in Planis ad Septemtrionem*	129.
52	*In Planis ad Orientem*	ibid.
53	*In Planis ad Occidentem*	130.
54	*In Planis declin. à Merid. ad Ortum*	ibid.
55	*In Planis declin. à Merid. ad Occaſum*	132.
56	*A Septemtrione ad Ortum*	134.
57	*A Septemtrione ad Occaſum*	135.
58	*De Vmbrarum longitudinibus*	ibid.
59	*De præmiſſorum Terminorum cognitionibus*	139.
60	*Aliter de Vmbrarum longitudinibus*	ibid.
61	*De eleuatione Poli ſuprà planum verticale*	141.
62	*Diſtantia Meridianæ plani, & loci*	143.
63	*De Angulo Meridiani Plani, & loci*	ibid.
64	*De momento Vmbræ breuiſſimæ in plano*	144.
65	*De diſtantia Solis à Meridiano Plani*	145.
66	*De Altitudine Solis ſuper Plana*	ibid.
67	*Si Plana reſpiciant directè Cardines*	149.
68	*De Arcubus Horizontalibus Horarum*	151.
69	*Alia methodus pro Vmbrarum longit. & latit.*	152.
70	*De Planis inclinatis*	153.

De

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